Eco ftruxure Innovation At Every Level

Product Selection Guide

EcoStruxure[™] Building

Integrated building management system



se.com/ecostruxure-building

Life Is On







Unlock building value, unleash productivity

Next generation EcoStruxure[™] Building from Schneider Electric is The Open Innovation Platform of Buildings – a collaborative Internet of Things (IoT) solution that features a scalable, secure and global architecture to create future-ready smart buildings.

EcoStruxure Building securely connects hardware, software, and services over an Ethernet IP backbone to:

- Maximize building efficiency
- Optimize comfort and productivity
- Increase building value

EcoXperts[™] and other system integrator partners also benefit from many new deployment tools to achieve:

- Up to 30% increase in engineering efficiency
- Up to 20% faster commissioning and installation
- 10x more scalability for large and multisite building needs



EcoStruxure Connected Room Solutions deliver buildings of the future

Our latest IP-enabled hardware and software helps create engaging environments with personalized comfort and increased operational and energy efficiency. Harness the power of today's smart buildings and the IoT to:

- enable Building Owners to **future-ready** their building's infrastructure for easier expansions and retrofits
- offer a personalized experience to tenants and occupants
- enable System Integrators to increase project capacity and cost-competitiveness

EcoStruxure Building delivers Innovation At Every Level



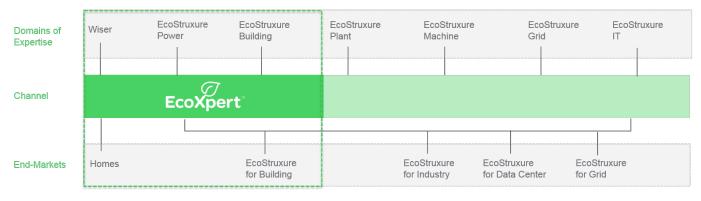
EcoXpert[™] Partner Program One Program. One Network. Endless Opportunities.

Innovating smarter buildings, more reliable infrastructures, and optimized efficiency.

At Schneider Electric, we constantly look beyond the norm to provide innovative solutions, both in technology and in the way we do business. That's the idea behind the EcoXpert[™] Partner Program – an esteemed partnership between Schneider Electric and more than 3,000 of the world's leading technology providers with best-in-class systems integration competencies. Working with partners we trust is as important to us as it is to our customers. Spanning more than 50 countries, EcoXpert companies are certified on our IoT-enabled EcoStruxure[™] architecture and platform, enabling them to deliver innovative and sustainable solutions, through integrated technology and digitization, to our shared customers.

Our mission is to connect expertise, ignite growth and enable success for our EcoXpert partner companies, because together we deliver best-in-class services and solutions to our valued customers.

The EcoXpert Program enables our certified partners and valued customers to share in the experience of ensuring that **Life Is On** everywhere, for everyone, and at every moment.



Our EcoXpert partners are the implementation arms of EcoStruxure in Homes and Buildings



Discover more about the EcoXpert Partner Program: https://www.schneider-electric.com/ecoxpert



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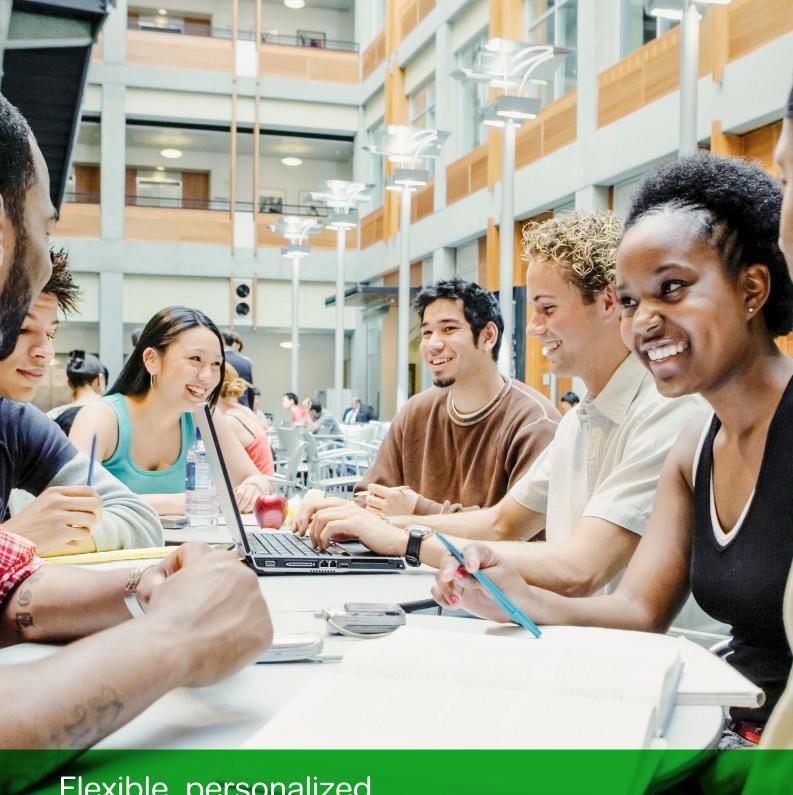
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Additional EcoStruxure Building Resources

Learn more about other offers A2-A9

Disclaimers

- Not all products in the guide may be available in every country, please check availability with the local Schneider Electric office.
- Some product images are not images of the exact model, but are represented by a "series" image.
- Information within this guide is subject to change without notice.
- Schneider Electric is not responsible for inadvertent typographical errors or omissions.



Flexible, personalized user workspace

EcoStruxure Building Operation provides an attractive, modern interface that can be organised by individual users to suit their needs. These preferences follow users regardless of where they log on. The information each user can access, such as graphics and alarms, can be managed at the job function, or individual level for added security and accountability.



EcoStruxure[™] Building Operation

EcoStruxure[™] Building Operation software is the edge control heart of the EcoStruxure Building system to monitor, manage and control building systems. With an open integration platform, it securely facilitates the exchange of data from both Schneider Electric and third-party energy, lighting, HVAC, fire safety, security and workplace management systems to create future-ready smart buildings.

Enterprise Central dedicated supervisory server at the top of the EcoStruxure Building system architecture can integrate up to 10 Enterprise Servers, hosting as many as 2,500 Servers (AS-P and AS-B) to easily scale operations management across the largest buildings, campuses, and multisite real estate portfolios from a single location.

Enterprise Server, the Windows® applications version of the Building Operation Server, is the single point of administration through WorkStation, WebStation, and mobile applications. Enterprise Server collects site-wide data and configures, controls and monitors the entire system. It generates aggregated reports, standardizes critical security policies, normalizes alarm presentation and prioritization, and audits activity across the entire organization.

Regulated-industries Compliance Pack provides facility-wide accountability and traceability of environmental and security conditions that can impact the quality and safety in controlled environments. With electronic reports and signatures, Compliance Pack maintains a complete archive of all system events, consolidated into one reporting structure for effortless search and retrieval. It complies with the FDA's 21 CFR Part 11 and ALCOA principals. (Available with EcoStruxure Building Operation 3.2.)

SpaceLogic Servers at the edge control level of the architecture are automation servers for use in any application. SpaceLogic Servers feature dual Ethernet ports that elevate BACnet field bus communication to the IP level to modernize existing building management systems while keeping in place existing field buses and devices.

WorkStation interface provides users and engineers with access to SpaceLogic Edge Servers and Enterprise Servers to view and manage graphics, alarms, scheduling, trend logs and reports. WorkStation offers a new array of engineering efficiency tools and features to speed administrative functions, including standard applications, mass change/mass update; custom types and libraries, and more.

WebStation user interface provides a truly mobile experience for anytime, anywhere access to commonly used functions of EcoStruxure Building Operation on any platform without the installation of additional software. Developers can engineer once and the workspace automatically adapts the same highquality user experience for desktop, tablet and mobile devices, saving valuable engineering time and resources.

Smart Connector is an open, extensible and configurable application framework that allows developers to create innovative new capabilities, applications and solutions that extend and enhance EcoStruxure[™] Building.

SmartDriver is a custom driver for connection with other intelligent building devices that use non-native protocols (available with Building Operation v1.8.1 and later versions).

Part Number	Product Name	Description
Enterprise Central		
SXWSWECXX00005	Enterprise Central - 5	The Enterprise Central is the Windows [®] application that aggregates and archives data from up to 5 EcoStruxure Enter- prise Servers
SXWSWECXX00010	Enterprise Central - 10	The Enterprise Central is the Windows® application that aggregates and archives data from up to 10 EcoStruxure Enter- prise Servers
Enterprise Server		
SXWSWESXX00010	Enterprise Server - 10	The Enterprise Server is the Windows® application that aggregates and archives data from up to 10 Servers
SXWSWESXX00050	Enterprise Server - 50	The Enterprise Server is the Windows® application that aggregates and archives data from up to 50 Servers
SXWSWESXX00100	Enterprise Server - 100	The Enterprise Server is the Windows® application that aggregates and archives data from up to 100 Servers
SXWSWESXX00250	Enterprise Server - 250	The Enterprise Server is the Windows® application that aggregates and archives data from up to 250 Servers
SXWSWASES00001	ES Hosting AS Pack -1	Allows the addition of one more Servers than were supported by the original Enterprise Server purchased
SXWSWNDES00010	ES Hosting AS Pack - 10	Allows the addition of 10 more Servers than were supported by the original Enterprise Server purchased
SXWSWNDES00005	ES Hosted Node Pack - 5	Allow the addition of 5 servers or controllers to any of the interfaces supported by the Enterprise Server
SXWSWNDES00010	ES Hosted Node Pack - 10	Allow the addition of 10 servers or controllers to any of the interfaces supported by the Enterprise Server
SXWSWNDES00025	ES Hosted Node Pack - 25	Allow the addition of 25 servers or controllers to any of the interfaces supported by the Enterprise Server
SXWSWNDES00050	ES Hosted Node Pack - 50	Allow the addition of 50 servers or controllers to any of the interfaces supported by the Enterprise Server
SXWSWNDES00100	ES Hosted Node Pack - 100	Allow the addition of 100 servers or controllers to any of the interfaces supported by the Enterprise Server
SXWSWNDES00300	ES Hosted Node Pack - 300	Allow the addition of 300 servers or controllers to any of the interfaces supported by the Enterprise Server
SXWSWNDES00600	ES Hosted Node Pack - 600	Allow the addition of 600 servers or controllers to any of the interfaces supported by the Enterprise Server

* The Enterprise Server is BACnet B-OWS and B-BC certified; the testing for this certification included the use of EcoStruxure Building Operation WorkStation as the HMI.

EcoStruxure[™] Building Operation (continued)

Part Number	Product Name	Description
Clients		
SXWSWCLIENT0001	Building Operation Client - 1	Fully featured environment for operating and administering all aspects of the system – 1 seat
SXWSWCLIENT0005	Building Operation Client - 5	Fully featured environment for operating and administering all aspects of the system – 5 seats
SXWSWCLIENT0010	Building Operation Client - 10	Fully featured environment for operating and administering all aspects of the system – 10 seats
SXWSWCLIENT0025	Building Operation Client - 25	Fully featured environment for operating and administering all aspects of the system – 25 seats
SXWSWCLIENT0999	Building Operation Client - unl	Fully featured environment for operating and administering all aspects of the system – Unlimited seats
Integration		
SXWSWSDRV00001	Smart Driver License	Allow "drivers" to be deployed, loaded and run on the Enterprise Server and the SpaceLogic Controller - AS-P
SXWSWSCDL100001	Smart Connector Deployment License	Allows the Smart Connector application to be deployed to a single server
Engineering Tools		
SXWSWWORK00002	WorkStation Professional	A full environment for operating and engineering all aspects of EcoStruxure Building Operation
SXWSWEDIT00001	Editors	An environment that provides the ability to edit graphics, script programs and function block programs.
Add-On Features		
SXWSWSNMP00001	SNMP Alarming	This option provides support for SNMP alarm traps v3.0 notifications on any EcoStruxure Building server.
SXWSWEWSX00001	EWS 1	A common integration method to other Schneider Electric systems and services. Consume
SXWSWEWSX00002	EWS 2	A common integration method to other Schneider Electric systems and services. Consume and serve
SXWSWEWSX00003	EWS 3	A common integration method to other Schneider Electric systems and services. Consume, serve and gather history
SXWSWGWSX00001	GWS	An integration method to other systems and services
SXWSWDASH00001	Personal Dashboards license	Enables Personal Dashboard feature on one Enterprise Server or Enterprise Central
SXWSWECDBTS001	TimescaleDB connection license	Enables high capacity historical storage in TimescaleDB on one Enterprise Central
SXWSWESDBTS001	TimescaleDB connection license	Enables high capacity historical storage in TimescaleDB on one Enterprise Server
SXWSWCMPLPK001	Regulated-industry Compliance Pack	Set of features to assist in validation in a regulated environment
SXWSWECPDFSS01	Building Operation PDF Sign EC	Enables PDF documents to be digitally signed at time of generation - EC
SXWSWESPDFSS01	Building Operation PDF Sign ES	Enables PDF documents to be digitally signed at time of generation - ES
SXWSWMQTTSRW01	MQTT - Read/Write - ES	Enterprise Server publishes data to MQTT broker
SXWSWESSDZR001	Building Operation Zoning – ES	Enables zoning in one ES and connected AS
SXWSWSTDBAC002	Semantic DB - Plus CPU Cores - 2	Extends semantic graph database capacity with 2 additional CPU cores
SXWSWSTDBAC006	Semantic DB - Plus CPU Cores - 6	Extends semantic graph database capacity with 6 additional CPU cores
SXWSWSTDBEUAC2	Semantic DB - External Use Plus Cores - 2	Enables programmatic queries from external tools to semantic graph database and extends capacity with 2 additional CPU cores
SXWSWSTDBEUAC6	Semantic DB - External Use Plus Cores - 6	Enables programmatic queries from external tools to semantic graph database and extends capacity with 6 additional CPU cores
SXWSWECSAML001	SAML Authentication - EC	Enables SAML 2.0 authentication on Enterprise Central
SXWSWESSAML001	SAML Authentication - ES	Enables SAML 2.0 authentication on Enterprise Server and connected SpaceLogic Edge Servers

(*) Only supported by Managed Device / BYOD Customized deployment method.

(**) Supported by Managed Device / BYOD Customized and Generic: this requires an unlimited devices deployment license.



Functionality matrix

WorkStation Standard - WorkStation software without graphics editor, script and function block programming editors. WorkStation Pro - WorkStation software including graphics editor, script and function block programming editors. WebStation - Direct access to an Automation Server and/or Enterprise Server using a web browser. WebReports - Direct access to the Reports Server using a web browser.

	WorkStation Standard ¹	WorkStation Pro ²	WebStation
Semantics			
Navigate, Search, Filter, View semantic descriptions	Yes	Yes	Yes
Create and edit semantic descriptions	Yes	Yes	
Dashboards			
View dashboards			Yes
Create and edit public dashboards	Yes ³	Yes ³	Yes
Create and edit personal dashboards			Yes
View slide shows			Yes
Create and edit slide shows	Yes	Yes	Yes
Develop custom dashboard components		Yes	
Zoning			
Graphical management			Yes⁴
Textual management	Yes⁴	Yes ⁴	Yes⁴
Alarms			
View alarms	Yes	Yes	Yes
Manage alarms	Yes	Yes	Yes
Edit alarms	Yes	Yes	Yes⁵
Create alarms	Yes	Yes	
Support for flashing and audible alarms	Yes	Yes	Yes
Create and edit alarm filters	Yes	Yes	Yes
View events	Yes	Yes	Yes
BACnet™			
View priority array	Yes	Yes	Yes
Edit priority array	Yes	Yes	Yes
Create devices (includes device discovery)	Yes	Yes	
Manage BACnet backup and restore	Yes	Yes	
Graphics			
View graphics	Yes	Yes	Yes
Create and edit graphics		Yes	
View graphics that use client API			Yes
Create graphics that use client API		Yes	
Trend Logs and Extended Trend Logs			
View trend logs	Yes	Yes	Yes
Edit trend logs	Yes	Yes	Yes ⁶
Create trend logs	Yes	Yes	Yes ⁷
View multi trend log lists	Yes	Yes	Yes
Create and edit multi trend log lists	Yes	Yes	Yes
Export multi trend log lists	Yes ⁸	Yes ⁸	Yes ⁹
View extended trend logs	Yes	Yes	Yes
Edit extended trend logs	Yes	Yes	Yes
Create extended trend logs	Yes	Yes	
LonWorks			
Create devices (includes device discovery)	Yes	Yes	
Manage devices	Yes	Yes	
View Network Variables (NVs) and	Yes	Yes	Yes
Configuration Parameters (CPs)			
Edit NVs and CPs	Yes	Yes	Yes
Modbus®			
Create devices	Yes	Yes	
Manage devices	Yes	Yes	
View values	Yes	Yes	Yes
Edit values	Yes	Yes	Yes

WorkStation software without Graphics Editor, Script Editor, and Function Block Editor. 1

WorkStation software including Graphics Editor, Script Editor, and Function Block Editor.

WorkStation software including Graphics Editor, Script Editor, and Function Block Editor Non-visual editing only. Requires add-on license Can edit alarm ranges, text, delay times, shunt variables, assignments, and deadband. Can only change parameters, for example, interval time. Can only create interval trend log type. Export to XML, CSV, and XLSX supported. Export to XML and XLSX supported.

2. 3. 4. 5. 6. 7.

8. 9.

Functionality matrix, continued

	WorkStation Standard ¹	WorkStation Pro ²	WebStation
Point Values			
View values	Yes	Yes	Yes
Edit values (for example, change a setpoint)	Yes	Yes	Yes
Programs			
Create and edit customised programs		Yes	
View graphical function block viewer	Yes	Yes	
Notification Reports			
Create and edit reports	Yes	Yes	
Schedules and Calendars			
View schedules and calendars	Yes	Yes	Yes
Edit schedules and calendars	Yes	Yes	Yes ¹¹
Create schedules and calendars	Yes	Yes	
Create multi schedule views	Yes	Yes	Yes
Edit and manage schedules in multi schedule view			Yes
Users and User Groups			
Create and edit users	Yes	Yes	Yes ¹²
Create and edit user group membership	Yes	Yes	Yes ¹²
Create and edit user groups	Yes	Yes	
Create and edit permissions	Yes	Yes	
User Experience			
View customized workspaces	Yes	Yes	Yes
View customized navigation panes	Yes	Yes	Yes
Log on as Windows Active Directory user	Yes	Yes	Yes
Log on using SAML 2.0 authentication			Yes
Automatic guest account log on	Yes	Yes	Yes
Password management	Yes	Yes	Yes
View saved searches	Yes	Yes	Yes
Create saved searches	Yes	Yes	
Edit saved searches	Yes	Yes	Yes
Simple and advanced searches	Yes	Yes	Yes
Kiosk mode			Yes
Bookmark views (web page URLs)			Yes
Bookmark favorite pages			Yes
Support for localization	Yes	Yes	Yes
Support for translation	Yes	Yes	Yes
Ability to change language on the client side	Yes	Yes	Yes
Use personal layout and filter favorites	Yes	Yes	Yes
Create and edit personal layout and filter favorites	Yes	Yes	Yes
Support for Dark Mode			Yes
Support custom accent color			Yes
Other			
Configure and edit I/O points, field buses, and communication ports	Yes	Yes	
Create and edit logical structure	Yes	Yes	
Create and edit views, panels, workspaces, and navigation panes	Yes	Yes	
View and configure Watch pane	Yes	Yes	Yes
Them and boiningure Watern pane	103		103
Administer backup and restore of database	Yes	Yes	

WorkStation software without Graphics Editor, Script Editor, and Function Block Editor. WorkStation software including Graphics Editor, Script Editor, and Function Block Editor. Can edit some parameters per report, can save changes or make a copy of the report with changes. Can edit only existing schedules and calendars. Cannot assign permissions. Excluding Graphics Editor, Script Editor, and Function Block Editor. 1. 2. 10. 11. 12. 13.

SpaceLogic Server – AS-P

The SpaceLogic Server – AS-P is an EcoStruxure server device at the Edge Level of the architecture. With superior performance, the AS-P simplifies system integration and modernization, and is the preferred choice for large, complex enterprise applications.



The AS-P and AS-B feature dual Ethernet ports to elevate BACnet field bus communication to the IP level. Modernize the BMS while keeping in place legacy field buses and devices to futureready current systems and move buildings into the 21st century!

	AS-P	AS-P-NL	AS-P-SMK	
Part Number	SXWASPXXX10001	SXWASPXXX10002	SWXASPXXX1S001	
Communications				
Communication Interface LonWorks FTT-10, BACnet BACnet MS/TP, Modbus T (Client+Server), Modbus s (Master+Slave), EWS, Ger WebSevice consume		BACnet/IP, BACnet MS/TP, Modbus TCP (Client+Server), Modbus serial (Master+Slave), EWS, Generic WebSevice consume	LonWorks FTT-10, BACnet/IP, BACnet MS/TP, Modbus TCP (Client+Server), Modbus serial (Master+Slave), EWS, Generic WebSevice consume	
Software				
Programability	Function Block/Script	Function Block/Script	Function Block/Script	
Physical	Programmable	Programmable	Programmable	
Dimensions	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	
Weight (including baseplate)		0.245 kg (0.54 lb)	0.245 kg (0.54 lb)	
Power				
Power	24 VDC	24 VDC	24 VDC	
Consumption	10 W	10 W	10 W	
Environmental				
Operating Range	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing)	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing)	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing)	
CPU Internals				
CPU	SPEAr320S, ARM926 core	SPEAr320S, ARM926 core	SPEAr320S, ARM926 core	
Memory	4 GB	4 GB	4 GB	
Battery	No	No	No	
Real time clock	Yes -10 days backup/Super Capacitor	Yes -10 days backup/Super Capacitor	Yes -10 days backup/Super Capacitor	
External Features				
Enclosure rating	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	
HOA Switches (DO/AO)	N/A	N/A	N/A	
Manual Override of Outputs	N/A	N/A	N/A	
Digital Status LEDs	Yes	Yes	Yes	
Service Port	Yes	Yes	Yes	
Terminals				
I/O Expansion	Yes - Up to 29 modules/464 max I/O	Yes - Up to 29 modules/464 max I/O	Yes - Up to 29 modules/464 max I/O	
External Enclosure/Mounting				
Mounting	DIN-rail or wall mount	DIN-rail or wall mount	DIN-rail or wall mount	
Certifications				
BTL	Yes	Yes	Yes	
FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	
Industry Canda (IC)	ICES-003 (Emission)	ICES-003 (Emission)	ICES-003 (Emission)	
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	
C-UL US	Yes	Yes	Yes	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the European Union	Yes	Yes	Yes	
RoHS Directive	Yes	Yes	Yes	
RCM	Yes	Yes	Yes	
US Patent	8 207 842, 8 271 102, 7 994 438	8 207 842, 8 271 102, 7 994 438	8 207 842, 8 271 102, 7 994 438	
UL-864	No	No	Yes	

*Notes: EcoStruxure solution installations or BMS transitions requiring UL-864 certifications must use the SpaceLogic Controller AS-P-SMK (listed above).

AS-P and AS-B conform to the BACnet[®] Building Controller (B-BC) profile at protocol revision 12 by the BACnet Testing Laboratories (BTL[®]). StruxureWare[™] Building Operation v1.9 is the certified firmware revision.

Power Supply and Module Terminal Bases

The PS-24V is a power supply module that accommodates 24 VAC or 24 VDC input power. Each power supply module delivers reliable and consistent output power of 24 VDC to the backplane. It can deliver power to the AS-P and a number of I/O modules calculated from the Power Budget Table (located below). If more I/O modules are needed, another power supply can be added to the bus. The power supplies are isolated from each other while also providing communication pass-through.



Part Number	Product Name	Description
SXWPS24VX10001	PS-24V	Power Supply 24 VAC or 21-30 VDC
SXWTBPSW110001	TB-PS-W1	Terminal Base Power Supply (Terminal Base required for each power supply)
SXWTBASW110002	TB-ASP-W1	Terminal Base AS-P (Terminal base required for each AS-P)
SXWTBIOW110001	TB-IO-W1	Terminal Base I/O (Terminal Base required for each I/O module)

PS-24V Automation Server Power Supply



NOTE: An appropriate terminal base is required for each module, including the AS-P, Power Supply and I/O Modules. See the above table for the correct part numbers.

I/O Module Terminal Base and Module Detail

Power Supply Selection Table

Power Requirements				
SpaceLogic Edge Server – AS-P	24 VDC / 10 W			
SpaceLogic Edge Server – AS-B	24 VDC / 10 W 24 VAC / 15 VA			
Power Requirements - Input only I/O	24 VDC Power			
DI-16	1.6 W			
RTD-DI-16	1.6 W			
UI-16	1.8 W			
Power Requirements - Output only I/O	24 VDC Power			
DO-FA-12	1.8 W			
DO-FA-12-H	1.8 W			
DO-FC-8	2.2 W			
DO-FC-8-H	2.2 W			
AO-8	4.9 W			
AO-8-H	4.9 W			
AO-V-8	0.7 W			
АО-V-8-Н	0.7 W			
Power Requirements - Mixed I/O	24 VDC Power			
UI-8/DO-FC-4	1.9 W			
UI-8/DO-FC-4-H	1.9 W			
UI-8/AO-4	3.2 W			
UI-8/AO-4-H	3.2 W			
UI-8/AO-V-4	1.0 W			
UI-8/AO-V-4-H	1.0 W			

Eco**£**truxure^{*}

AO-8,

I/O Modules

The Automation Server includes support for a broad spectrum of I/O modules. The variety of modules available ensures the right combination of points for any project, which keeps costs down for our customers. Some modules are available with Hand/Off/Auto (HOA) switches to provide override control of the outputs.



UI-16 16 Channel Universal Input



DI-16 16 Channel Digital Input

	UI-16	DI-16	AO-8-H	
Part Number	SXWUI16XX10001	SXWUI16XX10001 SXWDI16XX10001		
Physical				
Dimensions	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	
Weight (including baseplate)	0.269 kg (0.59 lb.)	0.255 kg (0.56 lb.)	0.279 kg (0.62 lb.)	
Power				
Power	24 VDC	24 VDC	24 VDC	
Consumption	1.8 W	1.6 W	0.7 W	
Environmental				
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 0-95% RH (non-condensing)	0 °C to 50 °C (32 °F to 122 °F) 0-95% RH (non-condensing)	0 °C to 50 °C (32 °F to 122 °F) 0-95% RH (non-condensing)	
External Features				
Enclosure rating	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	
HOA Switches (DO/AO)	No	No	Available on -H model	
Digital Status LEDs	Yes	Yes	No	
Service Port	No	No	No	
Terminals				
I/O Terminals	Terminal base	Terminal base	Terminal base	
External Enclosure/Mounting				
Mounting	DIN-rail or wall mount	DIN-rail or wall mount	DIN-rail or wall mount	
Certifications				
FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	
Industry Canada (IC)	ICES-003 (Emission)	ICES-003 (Emission)	ICES-003 (Emission)	
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	
C-UL US	No	No	No	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the European Union	1 Yes	Yes	Yes	
RoHS Directive	Yes	Yes	Yes	
RCM	Yes	Yes	Yes	
US Patent	7 994 438	7 994 438	7 994 438	



AO-8, AO-8-H 8 Channel Analog Output

I/O Modules, continued



AO-V-8 , AO-V-8-H 8 Channel Analog Output Voltage Points



DO-FA-12 , DO-FA-12-H 12 Channel Digital Output, Form-A

	AO-8-V-H	DO-FA-12-H	DO-FC-8-H	
Part Number	SXWAOV8XX10001, SXWDOA12X10001, SXWAOV8HX10001 SXWDOA12H10001		SXWDOC8XX10001, SXWDOC8HX10001	
Physical				
Dimensions	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)	
Weight (including baseplate)	0.279 kg (0.62 lb.)	0.317 kg (0.70 lb.)	0.332 kg (0.73 lb.)	
Power				
Power	24 VDC	24 VDC	24 VDC	
Consumption	0.7 W	1.8 W	2.2 W	
Environmental				
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 0-95% RH (non-condensing)	0 °C to 50 °C (32 °F to 122 °F) 0-95% RH (non-condensing)	0 °C to 50 °C (32 °F to 122 °F) 0-95% RH (non-condensing)	
External Features				
Enclosure rating	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	
HOA Switches (DO/AO)	Available on -H model	Available on -H model	Available on -H model	
Digital Status LEDs	No	Yes	Yes	
Service Port	No	No	No	
Terminals				
I/O Terminals	Terminal base	Terminal base	Terminal base	
External Enclosure/Mounting				
Mounting	DIN-rail or wall mount	DIN-rail or wall mount	DIN-rail or wall mount	
Certifications				
FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	
Industry Canada (IC)	ICES-003 (Emission)	ICES-003 (Emission)	ICES-003 (Emission)	
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	
C-UL US	No	No	Yes	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the Europear Union	Yes	Yes	Yes	
RoHS Directive	Yes	Yes	Yes	
RCM	Yes	Yes	Yes	
US Patent	2002/96/EC	2002/96/EC	2002/96/EC	

DO-FA-12,

DO-FC-8,

AO-8-V,



DO-FC-8, DO-FC-8-H 8 Channel Digital Output, Form-C

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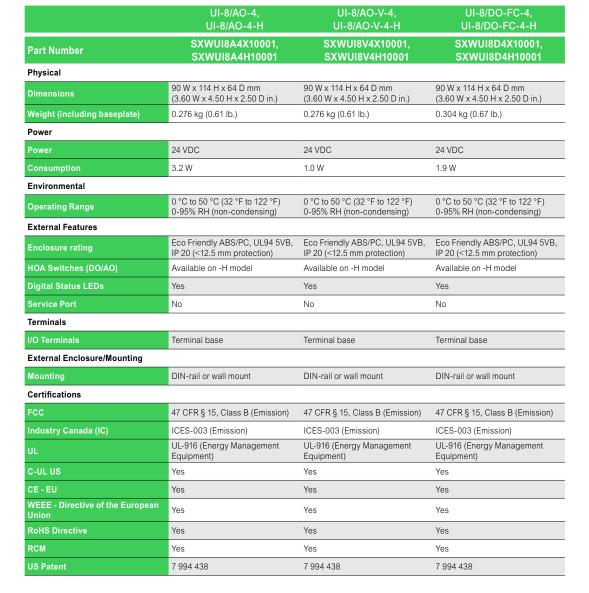
I/O Modules, continued



UI-8/AO-4, UI-8/AO-4-H 8 Channel Universal Inputs with 4 Analog Outputs



UI-8/AO-V-4, UI-8/AO-V-4-H 8 Channel Universal Inputs with 4 Channel Voltage Outputs (UI-8/AO-V-4-H shown)





UI-8/DO-FC-4, UI-8/DO-FC-4-H 8 Channel Universal Inputs with 4 Channel Digital Outputs, Form-C

I/O Modules, continued



RTD-DI-16 16 Channel Inputs (RTD and Digital) Combination Module

	RTD-DI-16		
Part Number	SXWRTD16X10001		
Physical			
Dimensions	90 W x 114 H x 64 D mm (3.60 W x 4.50 H x 2.50 D in.)		
Weight (including baseplate)	0.269 kg (0.59 lb.)		
Power			
Power	24 VDC		
Consumption	1.6 W		
Environmental			
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 0-95% RH (non-condensing)		
External Features			
Enclosure rating	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)		
HOA Switches (DO/AO)	No		
Digital Status LEDs	Yes		
Service Port	No		
Terminals			
I/O Terminals	Terminal base		
External Enclosure/Mounting			
Mounting	DIN-rail or wall mount		
Certifications			
FCC	47 CFR § 15, Class B (Emission)		
Industry Canada (IC)	ICES-003 (Emission)		
UL	UL-916 (Energy Management Equipment)		
C-UL US	Yes		
CE - EU	Yes		
WEEE - Directive of the European Union	Yes		
RoHS Directive	Yes		
RCM	Yes		
US Patent	7 994 438		

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I/O Modules – Inputs and Outputs

	UI-16	DI-16	AO-8, AO-8-H	AO-8-V, AO-8-V-H	DO-FA-12, DO-FA-12-H	DO-FC-8, DO-FC-8-H
Part Number	SXWUI16XX10001	SXWDI16XX10001	SXWAO8XXX10001, SXWAO8HXX10001	SXWAOV8XX10001, SXWAOV8HX10001	SXWDOA12X10001, SXWDOA12H10001	SXWDOC8XX10001, SXWDOC8HX10001
Universal Inputs	16					
Digital Contact	•					
Digital Counter - Low Speed						
Digital Counter - Medium Speed	•					
Digital Counter - High Speed						
Digital Supervised	•					
Analog Voltage - 0-1 V	•					
Analog Voltage - 0-5 V	•					
Analog Voltage - 0-10 V	•					
Analog Voltage - 2-10 V	•					
Analog Current - 0-20 mA	•					
Analog Current - 4-20 mA	•					
Analog Resistance	•					
Analog Thermistor - 10 k	•					
Analog Thermistor - 1.8 k	•					
Analog Thermistor - 1 k	•					
Analog Thermistor - 20 k	•					
Analog Thermistor - 2.2 k	•					
Analog RTD - Pt100						
Analog RTD - Pt1000						
Analog RTD - Ni1000						
Analog RTD - LG Ni1000						
Digital Inputs		16				
Digital Contact		•				
Counter - Low Speed						
Counter - Medium Speed		•				
Counter - High Speed						
Digital Outputs					12	8
Form A, SPST					•	
Form C, SPDT						•
Triac						
Analog Outputs			8	8		
Voltage - 0-10 V			•	•		
Current - 0-20 mA			•			

I/O Modules – Inputs and Outputs, continued

	UI-8/AO-4, UI-8/AO-4-H	UI-8/AO-V-4, UI-8/AO-V-4-H	UI-8/DO-FC-4, UI-8/DO-FC-4-H	RTD-DI-16
Part Number	SXWUI8A4X10001, SXWUI8A4H10001	SXWUI8V4X10001, SXWUI8V4H10001	SXWUI8D4X10001, SXWUI8D4H10001	SXWRTD16X10001
Universal Inputs	8	8	8	16*
Digital Contact	•	•	•	•
Digital Counter - Low Speed				
Digital Counter - Medium Speed	•	•	•	•
Digital Counter - High Speed				
Digital Supervised	•	•	•	
Analog Voltage - 0-1 V	•	•	•	
Analog Voltage - 0-5 V	•	•	•	
Analog Voltage - 0-10 V	•	•	•	
Analog Voltage - 2-10 V	•	•	•	
Analog Current - 0-20 mA	•	•	•	
Analog Current - 4-20 mA	•	•	•	
Analog Resistance	•	•	•	•
Analog Thermistor - 10 k	•	•	•	
Analog Thermistor - 1.8 k	•	•	•	
Analog Thermistor - 1 k	•	•	•	
Analog Thermistor - 20 k	•	•	•	
Analog Thermistor - 2.2 k	•	•	•	
Analog RTD - Pt100				•
Analog RTD - Pt1000				•
Analog RTD - Ni1000				•
Analog RTD - LG Ni1000				•
Digital Inputs				
Digital Contact				
Counter - Low Speed				
Counter - Medium Speed				
Counter - High Speed				
Digital Outputs			4	
Form A, SPST				
Form C, SPDT			•	
Triac				
Analog Outputs	4	4		
Voltage - 0-10 V	•	•		
Current - 0-20 mA	•			



SpaceLogic Edge Server – AS-B

The SpaceLogic Edge Server – AS-B is the most compact, all-in-one BMS. It features flexible on-board universal I/O configurations and built-in power supply. An EcoStruxure server device, its powerful, compact design is ideal for small-to-medium main plant control applications. It offers lower total installation costs.



Note: Screw terminal blocks for the AS-B are now delivered with the controller. Spare is available. See accessories section on page E16.

	AS-B-24P and AS-B-24H-P	AS-B-36-P and AS-B-36H-P
Part Number	SXWASB24(X,H)10001, SXWASB24PX10001, SXWASB24HP10001 (hardware only, software not included)	SXWASB36(X,H)10001, SXWASB36PX10001,
Communications		
Communication Interface	BACnet/IP, BACnet MS/TP, Modbus TCP (Client+Server), Modbus serial (Master+Slave), EWS, Generic WebSevice consume	BACnet/IP, BACnet MS/TP, Modbus TCP (Client+Server), Modbus serial (Master+Slave), EWS, Generic WebSevice consume
Software		
Programmability	Function Block/Script Programmable	Function Block/Script Programmable
Physical		
Dimensions	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)
Weight (including baseplate)	0.504 kg (1.111 lb)	0.504 kg (1.111 lb)
Power		
Power	24 VAC/DC	24 VAC/DC
Consumption	10 W	10 W
Environmental		
Operating Range	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing)	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing)
CPU Internals		
СРИ	SPEAr320S, ARM926 core	SPEAr320S, ARM926 core
Memory	4 GB	4 GB
Battery	No	No
Real time clock	Yes -10 days backup/Super Capacitor	Yes -10 days backup/Super Capacitor
External Features		
Enclosure rating	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5VB, IP 20 (<12.5 mm protection)
HOA Switches (DO/AO)	N/A	N/A
Manual Override of Outputs	Yes - On 'H' model	Yes - On 'H' model
Digital Status LEDs	Yes	Yes
Service Port	Yes	Yes
Terminals		
I/O Expansion	No	No
External Enclosure/Mounting		
Mounting	DIN-rail or wall mount	DIN-rail or wall mount
Certifications		
BTL	Yes	Yes
FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)
Industry Canada (IC)	ICES-003 (Emission) UL-916 (Energy Management	ICES-003 (Emission) UL-916 (Energy Management
UL	Equipment)	Equipment)
C-UL US	Yes	Yes
CE - EU	Yes	Yes
WEEE - Directive of the European Union	Yes	Yes
RoHS Directive	Yes	Yes
RCM	Yes	Yes
US Patent	8 207 842, 8 271 102, 7 994 438	8 207 842, 8 271 102, 7 994 438

*Notes: EcoStruxure Building installations or BMS transitions requiring UL-864 certifications must use the SpaceLogic Server AS-P-SMK (see page E6).

AS-P and AS-B conform to the BACnet[®] Building Controller (B-BC) profile at protocol revision 12 by the BACnet Testing Laboratories (BTL[®]). EcoStruxure[™] Building Operation v1.9 is the certified firmware revision.

Automation Server Family of Modules

SpaceLogic Server – AS-B – Inputs and Outputs

	AS-B-24-P and AS-B-24H-P	AS-B-36-P and AS-B-24H-P
Part Number	SXWASB24(X,H)10001, SXWASB24PX10001, SXWASBHP10001	SXWASB36(X,H)10001, SXWASB36PX10001, SXWASB36HP10001
Universal Inputs/Outputs	12-Ua 4-Ub	20-Ua 8-Ub
Digital Contact	Ua/Ub	Ua/Ub
Digital Counter - Low Speed		
Digital Counter - Medium Speed	•	•
Digital Counter - High Speed		
Digital Supervised	Ua/Ub	Ua/Ub
Analog Voltage - 0-1V	Ua/Ub	Ua/Ub
Analog Voltage - 0-5V	Ua/Ub	Ua/Ub
Analog Voltage - 0-10V	Ua/Ub	Ua/Ub
Analog Voltage - 2-10V	Ua/Ub	Ua/Ub
Analog Current - 0-20mA	Ub	Ub
Analog Current - 4-20mA	Ub	Ub
Analog Resistance	Ua/Ub	Ua/Ub
Analog Thermistor - 10k	Ua/Ub	Ua/Ub
Analog Thermistor - 1.8k	Ua/Ub	Ua/Ub
Analog Thermistor - 1k	Ua/Ub	Ua/Ub
Analog Thermistor - 20k	Ua/Ub	Ua/Ub
Analog Thermistor - 2.2k	Ua/Ub	Ua/Ub
Analog RTD - Pt100		
Analog RTD - Pt1000	Ua/Ub	Ua/Ub
Analog RTD - Ni1000	Ua/Ub	Ua/Ub
Analog RTD - LG Ni1000	Ua/Ub	Ua/Ub
Digital Inputs	4	
Digital Contact	•	
Counter - Low Speed		
Counter - Medium Speed		
Counter - High Speed		
Digital Outputs	4	8
Form A, SPST	•	4
Form C, SPDT		
PWM	•	•
Triac		4

Key: Ua – Universal Type A Ub – Universal Type B I – Input O – Output

Automation Server Family of Modules

Accessories

The following accessories are available for the Automation Server Family of modules.

	Part Number	Product Name	Description
Sec. 1	SXWDINEND10001	DIN-RAIL-CLIP-25	DIN-Rail End Clip, package of 25 pieces
· ·	SXWTERLBL10011	PRINTOUT-A4-W1	A4-Size blank printable adhesive label sheets for terminals (100 Sheets, 18 labels per Sheet)
	SXWTERLBL10012	PRINTOUT-LTR-W1	Letter-size blank printable adhesive label sheets for terminals (100 Sheets, 16 labels per Sheet)
	SXWSCABLE10002	S-CABLE-L-1.5M	S-Cable extension cord for Automation Server I/O bus, L shaped connectors, 1.5 m
	SXWSCABLE10003	S-CABLE-L-0.75M	S-Cable extension cable for Automation Server I/O bus, L-shaped connectors, 0.75 m
	SXWASBINS10001	AS-B installer kit	Dummy unit, no electronics, just terminals. Supports easy wiring in the panel shop
	SXWASBCON10001	AS-B Connector Kit	Spare screw terminals for all AS-B models
	SXWUSBADP10001	USB-485-INET Interface Adapter	I/NET Adapter: Seperate hardware component, added to a SpaceLogic Controller - AS-P or Automation Server

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SpaceLogic Edge Server add-on options

Add-on option part numbers are required to activate certain features. SpaceLogic Servers require an embedded license to activate features. An embedded license is not interchangeable with a Windows license.

Part Number	Product Name	Description
SXWSWSNMPX0001	EBO SNMP Alarming - SpaceLogic	Alarm notifications via SNMP – SpaceLogic Server
SXWSWEWSXX0001	EBO WS EWS Consume - SpaceLogic	EcoStruxure Web Services (run-time) option – Consume only – SpaceLogic Server
SXWSWEWSXX0002	EBO WS EWS C+Serve - SpaceLogic	EcoStruxure Web Services (run-time) option – Serve & Consume – SpaceLogic Server
SXWSWEWSXX0003	EBO WS EWS C+S+Hist - SpaceLogic	EcoStruxure Web Services (run-time) option – Serve & Consume, plus Historical trend log data – SpaceLogic Server
SXWSWGWSXX0001	EBO WS Gen Consume - SpaceLogic	Web Services (Generic Consume) option – SpaceLogic Server
SXWSWDASHX0001	Personal Dashboards - SpaceLogic	Built-in dashboard functionality which enables users to create their own pages to get an overview of how buildings perform – SpaceLogic Server
SXWSWASDBXS001	Timescale DB Option - SpaceLogic	Integration of an open, external SQL database for long term data and audit trail storage – SpaceLogic Server
SXWSWMQTTXRW01	MQTT - Read/Write - SpaceLogic	SpaceLogic Server publishes data to MQTT broker
SXWSWASSAML001	SAML Authentication - SpaceLogic server	Enables SAML 2.0 authentication on one SpaceLogic Edge Server

* An embedded client license that will be activated on a SpaceLogic Server will always allow for the operation of a WebStation only. In order for WorkStation to operate it must have access to a Windows license on a PC that is running a Windows OS. Since WorkStation software requires a Windows operating system, then the license might be installed on the same PC or it might make use of a demo license.

SpaceLogic User Interfaces (HMIs)

SpaceLogic Advanced Display

Portable or permanent-mount tablet HMI (10.1-inch) specifically configured to interact with EcoStruxure Building user interfaces. Purpose-built on an Android 8.1 platform.

	Part Number	Product Name	Description
E CLARMA STATE	SXWADBUND10003	Advanced Display 10.1-inch Bundle	
Hi Manga Mang Manga Manga Mang Manga Manga Mang	SXWADWIFI10001	AD v3 Wi-Fi Module	
Material Constraints and an	SXWADUSBC10001	USB-C cable, Straight, 2.4m (7.87 ft) - Only for use with Wi-Fi module	
	SXWADUSBC10002	USB cable, Y-shaped, 1.35m (4.43 ft)	
	SXWADUSBC10003	USB cable, Y-shaped, 2.85m (9.35 ft)	

SpaceLogic Operator Display

This 7-inch panel mounted touch screen interface for SpaceLogic controllers is specifically designed for local monitoring of building controllers in equipment rooms.

Part	Number	Product Name	Description
HMIST	T6400SL (Operator Display 7-inch bundle (inc	cludes HMI device, installation gasket, installation fasteners, and power supply connectors)
HMIZS	S53W1	Installation gasket (1 piece)	
HMIZS	SFIXTF1	Installation fasteners (2 pieces/set)	
XBTZ:	3004	Power supply connector fro small panel	s (10 pieces/set)

Wireless Connectivity

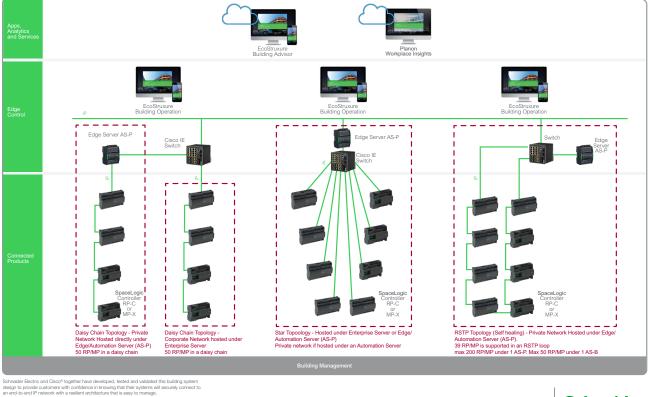
USB-based wireless adapter that enables Zigbee™ wireless connectivity for SpaceLogic Servers and SpaceLogic Controllers.

Part Number	Product Name	Description
SXWZBAUSB10001	ZB-A-USB	SpaceLogic Zigbee Adapter for the AS-P, AS-B and RP Series controllers
SXWUSBCRA10001	USB-CRA	USB adapter plastic mounting cradle and wall plate
SXWUSBCBL10001	USB-CBL-1	USB Extension Cable of Length 1 m (3 ft)
SXWUSBCBL10002	USB-CBL-3	Plenum rated USB Extension Cable of Length 3 m (10 ft)

EcoStruxure[™] Building

Powered by EcoStruxure[™] Building Operation

End-to-end IP Architecture Options



Schneider Electric Life Is On

EcoStruxure Connected Room Solutions

Create engaging environments with personalized comfort and increased operational and energy efficiency, which are essential in today's connected world. Connected Room Solutions feature a modular BACnet/IP Controller, the SpaceLogic Controller RP-C with native web services and Bluetooth capabilities for control of HVAC, lights and blinds. Built on a flexible architecture, the RP-C provides a consistent IP story across the building together with our existing network and field level controllers. Complementary offers include the Engage employee mobile app, SpaceLogic Living Space Sensors, and EcoStruxure eCommission Building Mobile App.

SpaceLogic IP Controller RP-C

Room Purpose Controller RP-C gives occupants the ability to control the room environment and personalize comfort while serving as a data hub for IoT devices. It leverages the latest wireless technologies as well as web services via the RESTful API for easy integration of IoT devices and fast installation. It is built on a flexible architecture that enables deployment with EcoStruxure Building Operation or any BMS.

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SpaceLogic Controllers – RP-C Advanced

The RP-C controllers are designed for fan coil, chilled beam and ceiling based systems. When used in combination with a variety of expansion modules, the controller can used for state-of-the-art lighting and blind control. These scalable and secure BACnet IP-based room controllers enable Connected Room Solutions. With an open IoT hub, it meets customers' future needs, including light and blind control and easy re-zoning. Also save time by managing commissioning conveniently with the EcoStruxure Building Commission mobile app.



SpaceLogic Controller – RP-C Advanced



SpaceLogic Controller – RP-C Advanced with external terminal cover

	RP-C-12A-F-24V	RP-C-12B-F-24V	RP-C-12C-F-24V	RP-C-16A-F-230V	
Part Number	SXWRCF12A10001	SXWRCF12B10001	SXWRCF12C10001	SXWRCF16A10002	
Communications					
Communication Interface	nication Interface BACnet/IP, BTL BA		BACnet/IP, BTL B-AAC	BACnet/IP, BTL B-AAC	
Software					
Programability	Function Block/Script Programmable	Function Block/Script Programmable	Function Block/Script Programmable	Function Block/Script Programmable	
Physical					
Dimensions	180 W x 110 H x 64 D mm (7.1 W x 4.3 H x 2.5 D in.)	180 W x 110 H x 64 D mm (7.1 W x 4.3 H x 2.5 D in.)	180 W x 110 H x 64 D mm (7.1 W x 4.3 H x 2.5 D in.)	180 W x 110 H x 64 D mm (7.1 W x 4.3 H x 2.5 D in.)	
Weight (including terminal blocks)	0.370 kg (0.816 lb)	0.390 kg (0.86 lb)	0.390 kg (0.86 lb)	0.720 kg (1.587 lb)	
Power					
Power	24 VAC/DC	24 VAC/DC	24 VAC/DC	230 VAC	
Consumption	23 VA	23 VA	23 VA	65 VA	
Environmental					
Operating Range	0°C to 50°C (32°F to 122°F) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F)	
Internals					
CPU	ARM Cortex-A7 single-core	ARM Cortex-A7 single-core	ARM Cortex-A7 single-core	ARM Cortex-A7 single-core	
On-board Bluetooth Low Energy	Yes	Yes	Yes	Yes	
Battery	No	No	No	No	
Real time clock	Yes -7 days	Yes -7 days	Yes -7 days	Yes -7 days	
External Features					
Enclosure rating	UL94 5VB, Plenum rated, IP 20 (<12.5 mm protection)	UL94 5VB, Plenum rated, IP 20 (<12.5 mm protection)	UL94 5VB, Plenum rated, IP 20 (<12.5 mm protection)	UL94 5VB, IP 20 (<12.5 mm protection)	
Manual Override of Outputs	No	No	No	No	
Optional cover	Yes	Yes	Yes	Yes	
Intelligent Sensors	SpaceLogic Living Space Sensors	SpaceLogic Living Space Sensors	SpaceLogic Living Space Sensors	SpaceLogic Living Space Sensors	
Sensor Bus	Yes	Yes	Yes	Yes	
Room Bus	Yes	Yes	Yes	Yes	
Terminals					
I/O terminals	Screw terminals	Screw terminals	Screw terminals	Screw terminals	
External Enclosure/Mounting					
Mounting	DIN-rail or wall mount	DIN-rail or wall mount	DIN-rail or wall mount	DIN-rail or wall mount	
Certifications					
BTL	Yes	Yes	Yes	Yes	
FCC	47 CFR §15, Subpart A and C, Class B (Emission)	47 CFR §15, Subpart A and C, Class B (Emission)	47 CFR §15, Subpart A and C, Class B (Emission)	No	
REACH	Yes	Yes	Yes	Yes	
Innovation, Science and Economic Development Canada (ISED)	Class B (Emission)	Class B (Emission)	Class B (Emission)	No	
UL	UL-916 (Energy Management Equipment)	UL-916 (Open Energy Management Equipment)	UL-916 (Open Energy Management Equipment)	No	
C-UL US	Yes	Yes	Yes	No	
CE - EU	Yes	Yes	Yes	Yes	
WEEE - Directive of the European Union	Yes	Yes	Yes	Yes	
RoHS Directive	Yes	Yes	Yes	Yes	
RCM	Yes	Yes	Yes	Yes	
eu.bac	No	No	No	Yes	

All eu.bac certified products are found on the eu.bac web site www.eubaccert.eu

SpaceLogic Controllers RP-C Advanced – Inputs and Outputs

	RP-C-12A-F-24V	RP-C-12B-F-24V	RP-C-12C-F-24V	RP-C-16A-F-230V
Part Number	SXWRCF12A10001	SXWRCF12B10001	SXWRCF12C10001	SXWRCF16A10002
Universal Inputs/Outputs	8-Ub	8-Ub	4-Ub	8-Ub
Digital Input	Ub	Ub	Ub	Ub
Counter Input	Ub	Ub	Ub	Ub
Supervised Input	Ub	Ub	Ub	Ub
Voltage Input (0-10 VDC)	Ub	Ub	Ub	Ub
Resistive Input	Ub	Ub	Ub	Ub
Current Input (0-20 mA)	Ub	Ub	Ub	Ub
Temperature Input	Ub	Ub	Ub	Ub
2-wire RTD Temperature Input	Ub	Ub	Ub	Ub
Thermistor Input - 10k	Ub	Ub	Ub	Ub
Thermistor Input - 1.8k	Ub	Ub	Ub	Ub
Thermistor Input - 1k	Ub	Ub	Ub	Ub
Thermistor Input - 20k	Ub	Ub	Ub	Ub
Thermistor Input - 2.2k	Ub	Ub	Ub	Ub
RTD Temp Input - Ni1000	Ub	Ub	Ub	Ub
RTD Temp Input - Pt1000	Ub	Ub	Ub	Ub
RTP Temp Input - LG-Ni1000	Ub	Ub	Ub	Ub
Voltage Output (0-10 VDC)	Ub	Ub	Ub	Ub
Digital Outputs				
Solid-state Relay Output (MOSFET)	4		4	4
Relay Output (Form A)		3	3	3
High Power Relay Output (Form C)		1	1	1

Key: Ub – Universal Type B

SpaceLogic Controllers RP-C – Accessories

The following accessories are available for the SpaceLogic IP Controller – RP-C Advanced.

Part number	Product Name	Description
SXWRPCCOV10001	RP-C external terminal covers	Optional external covers for RP-C HVAC



RP-C Advanced with optional covers

Wireless Connectivity

USB-based wireless adapter that enables Zigbee™ wireless connectivity for SpaceLogic Servers and Controllers.

Part Number	Product Name	Description	0	
SXWZBAUSB10001	ZB-A-USB	Zigbee Adapter for the AS-P, AS-B and RP Series controllers		
SXWUSBCRA10001	USB-CRA	USB adapter plastic mounting cradle and wall plate	•	
SXWUSBCBL10001	USB-CBL-1	USB Extension Cable of Length 1 m (3 ft)	(in a state	Zigł
SXWUSBCBL10002	USB-CBL-3	Plenum rated USB Extension Cable of Length 3 m (10 ft)	(Cara)	



SpaceLogic Sensors

Communicating sensors for SpaceLogic IP Controllers with the EcoStruxure Building Operation user interface. These sensors use an RJ-45 sensor bus that provides communication and power from the controller. For quick installation, up to four SpaceLogic sensors may be connected to each IP controller through the RJ-45 sensor bus using Cat 5/6 cable (22 to 26 AWG). A Bluetooth® adapter is available for commissioning and service. It is temporarily connected to installed communicating sensors and allows for quick setup and configuration. The Bluetooth adapter communicates to upload devices (smart phone, laptop, table, etc.) with the Living Space Sensor EcoStruxure Building Operation app installed via USB or Bluetooth communications. These sensors support light, blind and scene control when used with Connected Room Solutions.

SpaceLogic Living Space Sensors are modular and ordered in two parts: the sensor base and the cover. Four SpaceLogic communicating sensor base models are available that can be paired with any SpaceLogic cover model. CO2, Relative Humidity, and Temperature sensor base options provide an efficient, cost effective solution for living space air quality and comfort needs. Covers are available with a 61 mm (2.4") backlit color touchscreen and a three button non-display version for override and setpoint. Blank covers with no user interface are also available. All modular cover variants are available with and without passive infrared occupancy sensors.

Two complete sensor/cover combination model types are available:

- Temperature-only with LCD display. Communicating with three button cover. This is a low cost temperature sensor with a basic display.
- A two-wire, resistive-only, non-communicating temperature sensor is offered for a low cost conformance part. This uses an I/O port on the controller.

Combination models come with a sensor base and cover, and are available in White Optimum, Black Optimum or medium White Matte finishes. Combination units have the same form factor as the modular sensor bases and covers of the same housing type. (Combination units will not work with other covers.) Sensors measure the levels of CO2 (if equipped), RH (if equipped), and temperature of air in a living space application. The CO2 sensor operates within accuracy specifications for an interval of two years and can be field calibrated.

Find more information and part numbers on The EcoXpert Exchange: https://ecobuilding.schneider-electric. com/field-devices/sensors

EcoStruxure Building Commission Mobile App

Reduce commissioning time, gain flexibility in project execution, and eliminate dependencies on network infrastructure. This mobile application enables device configuration (including network settings), I/O checkout operations and configuration across all RP Series controllers (as well as the MP Series). It is ideal for all skill-sets including those who may have limited familiarity with the Building Operation system. The Commission tool with Connected Room Solution support is available to download from iOS, Google Play, and Windows 10.

EcoStruxure Engage Mobile App

Provides flexibility and convenience for today's building occupants, enabling them to control room temperature, fan speed, lights, and blinds/shades directly from a smartphone. Users can manage these settings when the mobile app is connected to the RP-C Controller. Free and downloadable from Google Play and Apple App Store.

Glass Touch Panels and TC900 Series Fan Coil Thermostats

EcoStruxure Connected Room Solutions for Hotels provide room level interfaces for temperature, lighting, blind control and door lock integration, in addition to a single point of integration for other IoT devices to create integrated and engaging guest room environments with responsive, personalized guest comfort and increased operational and energy efficiency.



Among the offers in this solution are Glass Touch Panels with intuitive touch-screen interfaces to enable guest control of room temperature, lighting, curtains, services, and more. Available in a variety of glass color and backlight options, Glass Touch Panels are highly customizable to reflect each hotel's unique visual aesthetic, and are easy to design and configure via an intuitive web tool. Find more information on the EcoXpert Exchange <u>here.</u>

TC900 Series Fan Coil Thermostats are optimized for hotel applications. They feature microprocessor-based control and large backlit LCD screens which display operation status (cooling, heating, and ventilation), fan speed, room temperature and set-point. Find more information on the EcoXpert Exchange <u>here.</u>









SpaceLogic Controllers - RP-C Expansion Modules for Light & Blinds

Wireless Expansion Modules

The RP-C Controller enables expansion module to be connected wirelessly using Zigbee. These modules enable wireless lighting control for existing applications.

Product	RP-C-EXT-ZB-0-10V	RP-C-EXT-ZB-DALI	
Part Number	SXWREZB010110001	SXWREZBDALI110001	
Communication			
Communication Interface	Zigbee Adaptor	Zigbee Adaptor	
Physical			
Dimensions	155 W x 44 H x 30 D mm (6.1 W x 1.7 H x 1.2 D in.)	155 W x 44 H x 30 D mm (6.1 W x 1.7 H x 1.2 D in.)	
Weight	0.126 kg (0.278 lb)	0.126 kg (0.278 lb)	
Power			
Nominal voltage	220 to 240 VAC	220 to 240 VAC	
Power consumption	<1W	<1W	
Environmental			
Operating Range	-20 °C to +50 °C (-4 °F to +122 °F)	-20 °C to +50 °C (-4 °F to +122 °F)	
Humidity	85 % RH	85 % RH	
Material			
Plastic flame rating	UL94 V-0	UL94 V-0	
IP rating	IP 20	IP 20	
Connectors	No	No	
Inputs			
Digital Inputs	No	No	
Outputs			
Type of Output	0-10V	DALI	
Number of outputs	1	1	
Power Distribution	Yes	Yes	
Certifications			
FCC	No	No	
UL	No	No	
CUL	No	No	
CE	Yes	Yes	
WEEE- Directive of EU	Yes	Yes	
RoHS	Yes	Yes	
RCM	No	No	

Wired Expansion Modules

The RP-C provides a room bus, which allows RP Series expansion modules and multi-sensors to be connected to the controller for control of lights and window blinds, motion detection, and luminosity measurements.

Product	RP-C-EXT-DALI-M-PD	RP-C-EXT-0-10V-4-PD	RP-C-EXT-BL-4-HV-PD	RP-C-EXT-BL-2-LV-PD
Part Number	SXWREDAMPD10001	SXWRE0104PD10001	SXWREB4HVPD10001	SXWREB2LVPD10001
Communication				
Communication Interface	Room Bus	Room Bus	Room Bus	Room Bus
Physical				
Dimensions	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)
Weight	0.433 kg (0.955 lb)	0.418 kg (0.922 lb)	0.437kg (0.963 lb)	0.399 kg (0.880 lb)
Power				
Nominal voltage	230VAC	230VAC	230VAC	230VAC
Power consumption	0.3W	0.3W	0.3W	0.3W
Environmental				
Operating Range	0 to 50 °C (32 to 122 °F)	0 to 50 °C (32 to 122 °F)	0 to 50 °C (32 to 122 °F)	0 to 40 °C (32 to 104 °F)
Humidity	20 to 90 % RH			
Material				
Plastic flame rating	UL94 V-0	UL94 V-0	UL94 V-0	UL94 V-0
IP rating	IP 20	IP 20	IP 20	IP 20
Connectors	Yes	Yes	Yes	Yes
Inputs				
Digital Inputs	4	4	4	4
Outputs				
Type of Output	DALI	0-10V	230V	24V
Number of outputs	4	4	4	2
Power Distribution	Yes	Yes	Yes	Yes
Certifications				
FCC	Yes	Yes	Yes	Yes
UL	No	No	No	No
C UL	No	No	No	No
CE	Yes	Yes	Yes	Yes
WEEE- Directive of EU	Yes	Yes	Yes	Yes
RoHS	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes



RP-C Controller High Voltage SMI Blind Module



RP-C Controller Light Module - 0-10V

SpaceLogic Controllers - RP-C Light & Blinds

Product	RP-C-EXT-MS-BLE	RP-C-EXT-BL-SMI-4- HV-PD	RP-C-EXT-BL-SMI-2-LV-PD	RP-C-EXT-REL-4	CRS-HH-REL-10
Part Number	SXWREMSBLE10001	SXWRESMI4HVPD10001	SXWRESMI2LVPD10001	SXWREREL410001	SXWHHREL10001
Communication					
Communication Interface	Room Bus	Room Bus	Room Bus	Room Bus	Room Bus
Physical					
Dimensions	97.5 mm (3.84 in.) overall diameter	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	198 W x 110H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)
weight	0.083 kg (0.183 lb)	0.405 kg (0.893 lb)	0.439 kg (0.968 lb)	0.378 kg (0.833 lb)	0.476 kg (1.050 lb)
Power					
Nominal voltage	24 VDC	230VAC	230VAC	100 to 277 VAC	24 VDC
Room bus power consumption	0.3W	0.3W	0.3W	0.3W	0.3W
Environmental					
Operating Range	0 to 50 °C (32 to 122 °F)	0 to 50 °C (32 to 122 °F)	0 to 40 °C (32 to 104 °F)	0 to 50 °C (32 to 122 °F)	0 to 50 °C (32 to 122 °F)
Humidity	20 to 90 % RH	20 to 90 % RH	20 to 90 % RH	20 to 90 % RH	20 to 90 % RH
Material					
Plastic flame rating	UL94 V-0	UL94 V-0	UL94 V-0	UL94 V-0	UL94 V-0
IP rating	IP 20	IP 20	IP 20	IP 20	IP 20
Connectors	No	Yes	Yes	Yes	10 x 2-pin plus 2 x 9-pin screw terminal blocks for relay outputs and digital inputs respectively
Inputs					
Digital Inputs	no	4	4	4	12
Outputs					
Type of Output	no	230V SMI	24V SMI	Relays	Relays
Number of outputs	0	4	2	4	10
Power Distribution	no	Yes	Yes	Yes	No
Certifications					
FCC	Yes	Yes	Yes	Yes	Yes
UL	Yes	No	No	Yes	Yes
C UL	Yes	No	No	Yes	Yes
CE	Yes	Yes	Yes	Yes	Yes
WEEE- Directive of EU	Yes	Yes	Yes	Yes	Yes
RoHS	Yes	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes	Yes



RP-C Controller Relay Module

SpaceLogic Controllers - RP-C Light & Blinds

Product	RP-C-EXT-0-10V-4	RP-C-EXT-DALI-1	RP-C-EXT-KNX	RP-C-EXT-0-10V-UNIDIM-1	RP-C-RC-BLE
Part Number	SXWRE010410001	SXWREDALI110001	SXWREKNX10001	SXWRE010DIM10001	SXWRERCBLE10001
Communication					
Communication Interface	Room Bus	Room Bus	Modbus	0-10V extension module	Bluetooth
Physical					
Dimensions	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)	18 W x 90 H x 60 D mm (0.7 W x 3.5 H x 2.4 D in.)	17.5W x35 mm DIN rail mount (0.7Wx 1.37 inch)	57 W x 143 H x 18 D mm (2.24 W x 5.63 H x 0.71 D in.)
weight	0.438 kg (0.965 lb)	0.352 kg (0.776 lb)	50 g (1.76 oz)		0.105 kg (0.231 lb)
Power					
Nominal voltage	100 to 277 VAC	100 to 277 VAC	24VDC	230VAC	3.0 VDC
Power Consumption	0.3W	0.3W	<0.24W	0.5W	n/a
Environmental					
Operating Range	0 to 50 °C (32 to 122 °F)	0 to 50 °C (32 to 122 °F)	-5 °C to +45 °C (23 °F to +113 °F)	-10 to 50 °C (14 to 122 °F)	0 to 40 °C (32 to 104 °F)
Humidity	20 to 90 % RH	20 to 90 % RH	5 to 93 % RH	n/a	20 to 90 % RH
Material					
Plastic flame rating	UL94 V-0	UL94 V-0	UL94 V-0	n/a	n/a
IP rating	IP 20	IP 20	IP 20	IP 20	IP 30
Connectors	Yes	Yes	No	No	No
Inputs					
Digital Inputs	4	4	No	No	No
Outputs					
Type of Output	0-10V	DALI	KNX	230V	n/a
Number of outputs	4	4	1	1	0
Power Distribution	no	no	no	Yes	No
Certifications					
FCC	Yes	Yes	no	no	Yes
UL	Yes	Yes	no	no	no
CUL	Yes	Yes	no	no	no
CE	Yes	Yes	Yes	Yes	Yes
WEEE- Directive of EU	Yes	Yes	Yes	Yes	Yes
RoHS	Yes	Yes	Yes	Yes	Yes
RCM	Yes	Yes	No	No	Yes

Connector accessories for RP-C Controller Expansion Modules

The following external connectors needed for the expansion modules are available for order in quantities of 50 or 100.

Proposed acc. part number	Wieland Reference	Product Name	Connectors per packet
SXWRPCCONWDI	91.921.2353.0	Digital input Connector	100
SXWRPCCONWWLIGHT2	91.922.3353.0	Light output connector for 0-10V modules without power distribution	100
SXWRPCCONWWLIGHT	91.922.3453.0	Light output connector for DALI modules without power distribution	100
SXWRPCCONWWPOW	91.931.4053.1	Power supply input connector	100
SXWRPCCONWWREL	91.932.4053.1	Relay output connector	100
SXWRPCCONWBLHV	91.942.4053.1	High Voltage blind output connector	50
SXWRPCCONWBLSMI	91.952.4053.1	High Voltage SMI blind output connector	50
SXWRPCCONWBLLV	91.952.4353.0	Low Voltage blind output connector	50
SXWRPCCONWWLIGHTPD	91.952.4453.0	Light output connector for light modules with power distribution	50

SpaceLogic Controller MP Series

Next-generation IP field controllers and accessories extend the reach of EcoStruxure Building's open innovation platform with seamless scalability and flexible topologies that enable data transmission from connected equipment, and enhance the ability to diagnose and resolve issues faster.



SpaceLogic Controllers – MP Series

The MP Series are designed for VAVs and fan coil, heat pump, roof top and air handling units. They feature scalable and flexible topologies that enable data transmission from connected equipment, which enhance the ability to diagnose and resolve issues faster. Also manage commissioning activities conveniently from mobile devices with the EcoStruxure Building Commission Mobile App.



SpaceLogic Controller – MP-C

Note: Screw terminals are prepopulated. Spare is available. See accessories section on page S6.

	MP-C-15A	MP-C-18A	MP-C-18B	MP-C-24A	MP-C-36A
Part Number	SXWMPC15A10001	SXWMPC18A10001	SXWMPC18B10001	SXWMPC24A10001	SXWMPC36A10001
Other Models	MP-C-15A-SMK	MP-C-18A-SMK	MP-C-18B-SMK	MP-C-24A-SMK	MP-C-36A-SMK
Part Number	SXWMPC15A1S001				
(UL-864 Smoke Control)	SAWWPC15A15001	SXWMPC18A1S001	SXWMPC18B1S001	SXWMPC24A1S001	SXWMPC36A1S001
Communications					
Communication Interface	BACnet/IP, BTL B-AAC				
Software	57010	57010	27.00	27.00	27010
Programability	Function Block/Script Programmable	Function Block/Script Programmable	Function Block/ Script Programmable	Function Block/ Script Programmable	Function Block/ Script Programmable
Physical	Trogrammable	Trogrammable			
Dimensions	153 W x 110 H x 64 D mm (6.0 W x 4.3 H x 2.5 D in.)	153 W x 110 H x 64 D mm (6.0 W x 4.3 H x 2.5 D in.)	153 W x 110 H x 64 D mm (6.0 W x 4.3 H x 2.5 D in.)	234 W x 110 H x 64 D mm (9.2 W x 4.3 H x 2.5 D in.)	234 W x 110 H x 64 D mm (9.2 W x 4.3 H x 2.5 D in.)
Weight (including terminal blocks)	0.358 kg (0.789 lb)	0.371 kg (0.818 lb)	0.361 kg (0.796 lb)	0.495 kg (1.091 lb)	0.547 kg (1.206 lb)
Power	041100/00	041/40/00	041140/00	041/40/00	24.14.0/DC
Power	24 VAC/DC				
Consumption Environmental	12 W	12 W	12 W	15 W	18 W
Operating Range6	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) -40°C to 60°C (-40°F to 140°F) for rooftop
CPU Internals					
CPU	ARM Cortex-A7 dual-core				
Memory	128 MB (DDR3 SDRAM)				
Battery	No	No	No	No	No
Real time clock	Yes -7 days minimum				
External Features					
Enclosure rating	Eco Friendly ABS/ PC, UL94 5V, IP 20 (<12.5 mm protection)	Eco Friendly ABS/ PC, UL94 5V, IP 20 (<12.5 mm protection)	Eco Friendly ABS/ PC, UL94 5V, IP 20 (<12.5 mm protection)	Eco Friendly ABS/ PC, UL94 5V, IP 20 (<12.5 mm protection)	Eco Friendly ABS/ PC, UL94 5V, IP 20 (<12.5 mm protection)
HOA Switches (DO/AO)	Add-On (see accessories)				
Manual Override of Outputs	Yes	Yes	Yes	Yes	Yes
Digital Status LEDs	Yes	Yes	Yes	Yes	Yes
Intelligent Sensors	SpaceLogic Living Space sensors	SpaceLogic Living Space sensors	SpaceLogic Living Space sensors	SpaceLogic Living Space sensors	SpaceLogic Living Space sensors
Sensor Bus	Yes	Yes	Yes	Yes	Yes
Terminals					
I/O terminals	Two-piece terminal				
External Enclosure/Mounting					
Mounting	DIN-rail or wall mount				
Certifications					
BTL	Yes	Yes	Yes	Yes	Yes
FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	(Emission)	47 CFR § 15, Class B (Emission)
REACH	Yes	Yes	Yes	Yes	Yes
Innovation, Science and Economic Development Canada (ISED)	Class B (Emission)				
UL	UL-916 (Energy Management Equipment)				
C-UL US	Yes	Yes	Yes	Yes	Yes
CE - EU	Yes	Yes	Yes	Yes	Yes
WEEE - Directive of the European Union	Yes	Yes	Yes	Yes	Yes
RoHS Directive	Yes	Yes	Yes	Yes	Yes
RCM	Yes	Yes	Yes	Yes	Yes
US Patent					

SpaceLogic Controllers MP-C and MP-V conform to the BACnet® Advanced Application Controller (B-AAC) profile at protocol revision 12 by the BACnet Testing Laboratories (BTL®). EcoStruxure solution installations or BMS transitions requiring UL-864 certifications must use the SpaceLogic Controller MP-C-xxx-SMK (listed above).

SpaceLogic IP Controller MP-V



Note: Screw terminals are prepopulated. Spare is available. See accessories section on page S6.

Part NumberSXWMPV7AX10001SXWMPV9AX10001Other ModelsMP-V7A.SMKMP-V3A.SMKPart NumberSWMPV7AX15001SXWMPV9AX15001CommunicationCommunicationStremp Part Stremp Part Stremp Part Stremp Part Stremp Part Part Stremp Part		MP-V-7A	MP-V-9A
Part Number SXWMPV7AXIS001 SXWMPV9AXIS001 Communication SXWMPV7AXIS001 SXWMPV9AXIS001 Communication Interface BACnet/IP, BTL B-AAC BACnet/IP, BTL B-AAC Software Function Block/Script Programmable Function Block/Script Programmable Physical Function Block/Script Programmable Physical 161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.) 161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.) Physical 113 kg (2.5 b) 1.13 kg (2.5 b) 1.13 kg (2.5 b) Power 24 VAC 24 VAC 24 VAC Consumption 21 VA 22 VA 22 VA Environmental 0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing) 0.95% RH (non-condensing) CPU Internals 0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing) 0.95% RH (non-condensing) CPU Internals 0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing) 0.95% RH (non-condensing) CPU Internals 0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing) 0.95% RH (non-condensing) CPU Internals External Factures Ves 7 doys minimum Ves 7 doys min	Part Number	SXWMPV7AX10001	SXWMPV9AX10001
(UL-86 4 moke Control SAWMP YEAR ISOU SAWMP YEAR ISOU Communication BACnet//P, BTL B-AAC BACnet//P, BTL B-AAC Software Function Block/Script Programmable Function Block/Script Programmable Physical Tube ISOU Software Physical 111 Wx 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.) 161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.) Power 113 kg (2.5 lb) 113 kg (2.5 lb) 113 kg (2.5 lb) Power 24 VAC 24 VAC Consumption 21 VA 22 VA Power 40 VAC 24 VAC Consumption 0.95% RH (non-condensing) 0.95% RH (non-condensing) CPU ARM Cortex-A7 dual-core ARM Cortex-A7 dual-core Renory 128 MS (DR3 SDRAM) 128 MS (DR3 SDRAM) Battery No No Real time clock Yes -7 days minimum External Features Eco Friendly ABS/PC, UL94 V-0, IP 20 (c12.5 mm protection), Plenum Reided (c12.5 mm protection), Plenum	Other Models	MP-V-7A-SMK	MP-V-9A-SMK
Communication InterfaceBACenti/P, BTL B-AACBACenti/P, BTL B-AACSoftwareProgramabilityFunction Block/Script ProgrammableFunction Block/Script ProgrammablePhysicaObmensions161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.)161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.)Weight (including baseplate)113 kg (2.5 lb)113 kg (2.5 lb)Power24 VAC24 VACConsumption21 VA22 VAEnvironmental0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing)0°S % Condensing)Operating Range0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing)0°S % RH (non-condensing)OPUI Internals0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing)0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing)CPUARM Cortex-A7 dual-coreARM Cortex-A7 dual-coreARM Cortex-A7 dual-coreMemory128 MB (DDR3 SDRAM)128 MB (DDR3 SDRAM)128 MB (DDR3 SDRAM)BatteryNoNoNoReat the clockYes / days minimumYesEnclosure ratingEco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated		SXWMPV7AX1S001	SXWMPV9AX1S001
Software Function Block/Script Programmable Function Block/Script Programmable Programability Function Block/Script Programmable Function Block/Script Programmable Physical Itel W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.) 161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.) Poing functioning 113 kg (2.5 lb) 1.13 kg (2.5 lb) 1.13 kg (2.5 lb) Power 24 VAC 24 VAC 24 VAC Consumption 21 VA 22 VA 22 VA Environmental 0°C lb 50°C (32°F to 122°F) 0°C lb 50°C (62°F to 122°F) 0.945%, RH (non-condensing) CPU ARM Cortex-A7 dual-core ARM Cortex-A7 dual-core 0.945%, RH (non-condensing) CPU RM Cortex-A7 dual-core ARM Cortex-A7 dual-core 0.945%, RH (non-condensing) CPU RM Cortex-A7 dual-core Memory 128 MB (DDR3 SDRAM) 128 MB (DDR3 SDRAM) Battery No No No 24 VAC CPU RM cortex-A7 dual-core Kernal Ecok Ves.7 days minimum External Features Eco Friendly ABS/PC, UL94 V-0, IP 20 ((<12.5 mm protection), Pienum Rated (<12.5 mm protection), Pienum Rated<	Communications		
ProgramabilityFunction Block/Script ProgrammableFunction Block/Script ProgrammablePhysicalDimensions161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.)161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.)Weight (including baseplate)1.13 kg (2.5 lb)1.13 kg (2.5 lb)PowerPowerPower24 VAC24 VACConsumption21 V A22 VAEnvironmentalCPUARM Cortex-A7 dual-coreARM Cortex-A7 dual-coreMemory128 M [ODR3 SDRAM)128 M [ODR3 SDRAM)BatteryNoNoReal time clockYes-7 days minimumEnclosure rating Cort 250 ring Vals MS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated	Communication Interface	BACnet/IP, BTL B-AAC	BACnet/IP, BTL B-AAC
Physical Dimensions 161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.) 161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.) Weight (including baseplate) 1.13 kg (2.5 lb) 1.13 kg (2.5 lb) Power 24 VAC 24 VAC Consumption 21 VA 22 VA Environmental 0°C to 50°C (32°F to 122°F) 0°C to 50°C (62°F to 122°F) Operating Range 0°C to 50°C (32°F to 122°F) 0°C to 50°C (62°F to 122°F) CPU ARM Cortex-A7 dual-core ARM Cortex-A7 dual-core Memory 128 MB (DDR3 SDRAM) 128 MB (DDR3 SDRAM) Battery No No Real time clock Yes -7 days minimum Yes -7 days minimum External Features Eoo Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated (<12.5 mm protection), Plenum Rated (<12.5 mm protection), Plenum Rated Yes HOA Switches (DO/AO) N/A N/A N/A Manual Override of Outputs Yes Yes Yes Sensor Bus Yes Yes Yes Terminals Yes Yes Yes FCC 47 CFR § 15, Class B (Software		
Dimensions161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.6 D in.)161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.6 D in.)Weight (including baseplate)1.13 kg (2.5 lb)1.13 kg (2.5 lb)Power24 VAC24 VACConsumption21 VA22 VAEnvironmental0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing)0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing)CPUARM Cortex-A7 dual-coreARM Cortex-A7 dual-coreMemory128 M6 (DDR3 SDRAM)128 M6 (DDR3 SDRAM)BatteryNoNoReal time clockYes -7 days minimumExclosure rating Manual Overfield of OutputsEco Friendly ABS/PC, UL94 V-0, IP 20 (c12.5 mm protection), Plenum RatedHOA Switches (DAO)NANAManual Overfield of OutputsYesYesIogansionNoNoExternal Enclosure/ MountingWeis StatesYesIogansionNoNoExternal Enclosure/ MountingWeis StatesYesIogansionNoNoExternal Enclosure/ MountingWeis States B(Emission)YesIogansionNoNoExternal Enclosure/ MountingYesYesIogansionNoNoExternal Enclosure/ MountingYesIogansionNoReactYesIogansionNoIogansionNoExternal Enclosure/ MountingYesIogansionYesIogansionYesIogansionYes<	Programability	Function Block/Script Programmable	Function Block/Script Programmable
Weight (including baseplate) 1.13 kg (2.5 lb) 1.13 kg (2.5 lb) Power Power 24 VAC 24 VAC Consumption 21 VA 21 VA 22 VA Environmental 0°C to 50°C (32°F to 122°F) 0-95% R (non-condensing) 0-95% R (non-condensing) CPU ARM Cortex-A7 dual-core Memory 128 MB (DDR3 SDRAM) Battery No Real time clock Yes -7 days minimum External Features E Enclosure rating Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated HOA Switches (DO/AO) NA Manual Override of Outputs Yes Digital Status LEDs Yes Yes Yes Vo Expansion No External Features Ves Vio Expansion No No No External Features Yes Consumption No Sensor Bus Yes Yes Yes Sensor Bus Yes Yes Yes Conting wall mount Catifications Yes FCC 47 CFR § 15, Class B (Emission) REACH Yes	Physical		
baseplate)1.13 kg (2.5 lb)1.13 kg (2.5 lb)PowerPowerPower24 VAC24 VACConsumption21 VA22 VAEnvironmental0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing)0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing)CPUARM Cortex-A7 dual-coreARM Cortex-A7 dual-coreMemory128 MB (DDR3 SDRAM)128 MB (DDR3 SDRAM)BatteryNoNoReal time clockYes-7 days minimumExternal FeaturesEEnclosure ratingCor Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated	Dimensions	161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.)	161 W x 198 H x 63 D mm (6.3 W x 7.8 H x 2.5 D in.)
Power24 VAC24 VACConsumption21 VA22 VAEnvironmental0°C to 50°C (32°F to 122°F) 0°55% RH (non-condensing)0°C to 50°C (32°F to 122°F) 0°55% RH (non-condensing)Operating Range0°C to 50°C (32°F to 122°F) 0°55% RH (non-condensing)0°C to 50°C (32°F to 122°F) 0°55% RH (non-condensing)CPUARM Cortex-A7 dual-coreARM Cortex-A7 dual-coreMemory128 MB (DDR3 SDRAM)128 MB (DDR3 SDRAM)BatteryNoNoReal time clockYes-7 days minimumExtensal FeaturesEco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum RatedEnclosure ratingÉco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum RatedHOA Switches (DO/AO)N/AN/AManual Override of OutputsYesYesYesYesDigital Status LEDsYesYesExternal Enclosure/ Mountingwall mountwall mountCertificationsEFecFCC47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)REACHYesYesInnovation, Seience and Economic DevelopmentClass B (Emission)Class B (Emission)ULUL916 (Energy Management Equipment)UL916 (Energy Management Equipment)		1.13 kg (2.5 lb)	1.13 kg (2.5 lb)
Consumption 21 VA 22 VA Environmental 0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) 0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) CPU Internals CPU ARM Cortex-A7 dual-core ARM Cortex-A7 dual-core Memory 128 MB (DDR3 SDRAM) 128 MB (DDR3 SDRAM) 128 MB (DDR3 SDRAM) Battery No No Real time clock Yes -7 days minimum External Features Eco Friendly ABS/PC, UL94 V-0, IP 20 (c12.5 mm protection), Plenum Rated Eco Friendly ABS/PC, UL94 V-0, IP 20 (c12.5 mm protection), Plenum Rated (<12.5 mm protection), Plenum Rated HOA Switches (D0/AO) N/A N/A Manual Override of Outputs Yes Digital Status LEDs Yes Yes Yes Yes External Feclosure/ Mounting wall mount wall mount Kernal Feclosure/ Mounting Wall mount FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Yes Yes Innovation, Science and Economic Development Class B (Emission) Class B (Emission)	Power		
Environmental Operating Range 0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing) 0°C to 50°C (32°F to 122°F) 0.95% RH (non-condensing) CPU ARM Cortex-A7 dual-core ARM Cortex-A7 dual-core Memory 128 MB (DDR3 SDRAM) 128 MB (DDR3 SDRAM) Battery No No Real time clock Yes -7 days minimum Yes -7 days minimum External Features Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated HOA switches (DO/AO) N/A N/A Manual Override of Outputs Yes Yes Joigtal Status LEDs Yes Yes Sensor Bus Yes Yes Ves Yes Yes I/O Expansion No No External Enclosure/ Mounting wall mount wall mount Certifications E Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Yes Innovation, Science and Economic Development Class B (Emission) Class B (Emission)	Power	24 VAC	24 VAC
Operating Range D*C to 50°C (32°F to 122°F) D-95% RH (non-condensing) D*C to 50°C (32°F to 122°F) D-95% RH (non-condensing) CPU Internals ARM Cortex-A7 dual-core ARM Cortex-A7 dual-core Memory 128 MB (DDR3 SDRAM) 128 MB (DDR3 SDRAM) Battery No No Real time clock Yes -7 days minimum Yes -7 days minimum External Features Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated HOA Switches (DO/AO) N/A N/A Manual Override of Outputs Yes Yes Joigtal Status LEDs Yes Yes Terminals Yes Yes //O Expansion No No External Enclosure/ Mounting wall mount wall mount Certifications E Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Class B (Emission) Class B (Emission) Question UL-916 (Energy Managem	Consumption	21 VA	22 VA
Operating Range 0-95% RH (non-condensing) 0-95% RH (non-condensing) CPU ARM Cortex-A7 dual-core ARM Cortex-A7 dual-core Memory 128 MB (DDR3 SDRAM) 128 MB (DDR3 SDRAM) Battery No No Real time clock Yes -7 days minimum Yes -7 days minimum External Features Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated HOA Switches (DO/AO) N/A N/A Manual Override of Outputs Yes Yes Digital Status LEDs Yes Yes Sensor Bus Yes Yes I/O Expansion No No External Enclosure/ Mounting wall mount wall mount Certifications F Yes BTL Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission)	Environmental		
CPUARM Cortex-A7 dual-coreARM Cortex-A7 dual-coreMemory128 MB (DDR3 SDRAM)128 MB (DDR3 SDRAM)BatteryNoNoReal time clockYes -7 days minimumYes -7 days minimumExternal FeaturesEco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum RatedEco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum RatedHOA Switches (DO/AO)N/AN/AManual Override of OutputsYesYesYesYesYesSensor BusYesYesI/O ExpansionNoNoKetrinal Enclosure/ Mountingwall mountWannal Override of Outputswall mountWannal Override of OutputsYesYesYesSensor BusYesYesYesTermialsIf Constant Sensor BusYo ExpansionNoNoRetermal Enclosure/ Sensor BusMountingwall mountWantingWall mountCertificationsIf Constant Sensor BusFCC47 CFR § 15, Class B (Emission)REACHYesInnovation, Science and Economic Development Canada (ISED)Class B (Emission)ULU-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)	Operating Range		
Memory128 MB (DDR3 SDRAM)128 MB (DDR3 SDRAM)BatteryNoNoReal time clockYes -7 days minimumYes -7 days minimumExternal FeaturesEco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated	CPU Internals		
Battery No No Real time clock Yes -7 days minimum Yes -7 days minimum External Features Enclosure rating Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated HOA Switches (DO/AO) N/A N/A Manual Override of Outputs Yes Yes Digital Status LEDs Yes Yes Sensor Bus Yes Yes I/O Expansion No No External Enclosure/ Mounting wall mount wall mount Certifications HIL Yes Yes BTL Yes Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	CPU	ARM Cortex-A7 dual-core	ARM Cortex-A7 dual-core
Real time clock Yes -7 days minimum Yes -7 days minimum External Features Eco Friendly ABS/PC, UL.94 V-0, IP 20 Eco Friendly ABS/PC, UL.94 V-0, IP 20 Enclosure rating Eco Friendly ABS/PC, UL.94 V-0, IP 20 Eco Friendly ABS/PC, UL.94 V-0, IP 20 HOA Switches (DO/AO) N/A N/A Manual Override of Outputs Yes Yes Digital Status LEDs Yes Yes Sensor Bus Yes Yes Terminals Ves Yes I/O Expansion No No External Enclosure/ Mounting wall mount wall mount Certifications FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Yes Innovation, Science and Economic Development Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	Memory	128 MB (DDR3 SDRAM)	128 MB (DDR3 SDRAM)
External Features Enclosure rating Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated Eco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated HOA Switches (DO/AO) N/A N/A Manual Override of Outputs Yes Yes Digital Status LEDs Yes Yes Sensor Bus Yes Yes I/O Expansion No No External Enclosure/ Mounting wall mount wall mount Certifications Yes Yes BTL Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	Battery	No	No
Enclosure ratingEco Friendly ABS/PC, UL94 V-0, IP 20 (<12.5 mm protection), Plenum Rated	Real time clock	Yes -7 days minimum	Yes -7 days minimum
Enclosure rating(<12.5 mm protection), Plenum Rated	External Features		
Manual Override of OutputsYesYesDigital Status LEDsYesYesSensor BusYesYesTerminalsI/O ExpansionNoI/O ExpansionNoNoExternal Enclosure/ Mountingwall mountMountingwall mountwall mountCertificationsFCC47 CFR § 15, Class B (Emission)BTLYesYesFCC47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)REACHYesYesInnovation, Science and Economic Development Canada (ISED)Class B (Emission)ULUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)	Enclosure rating		
OutputsYesYesDigital Status LEDsYesYesSensor BusYesYesTerminalsImage: Sensor Bus in the sensor	· · · · · · · · · · · · · · · · · · ·	N/A	N/A
Sensor Bus Yes Yes Terminals I/O Expansion No No I/O Expansion No No External Enclosure/ Mounting Mounting wall mount wall mount Certifications External Coccession Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)		Yes	Yes
Terminals I/O Expansion No No External Enclosure/ Mounting wall mount wall mount Mounting wall mount wall mount Certifications E FCC BTL Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Cass B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	Digital Status LEDs	Yes	Yes
I/O Expansion No No External Enclosure/ Mounting wall mount wall mount Mounting wall mount wall mount Certifications BTL Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	Sensor Bus	Yes	Yes
External Enclosure/ Mounting wall mount Mounting wall mount Certifications Wall mount BTL Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	Terminals		
Mounting wall mount wall mount Certifications BTL Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)		No	No
Certifications BTL Yes BTL Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)			
BTL Yes Yes FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	Mounting	wall mount	wall mount
FCC 47 CFR § 15, Class B (Emission) 47 CFR § 15, Class B (Emission) REACH Yes Yes Innovation, Science and Economic Development Cansa B (Emission) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	Certifications		
REACH Yes Yes Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	BTL	Yes	Yes
Innovation, Science and Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)
Economic Development Canada (ISED) Class B (Emission) Class B (Emission) UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)		Yes	Yes
UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment)	Economic Development	Class B (Emission)	Class B (Emission)
UL-864 Yes Yes		UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)
	UL-864	Yes	Yes
C-UL US Yes Yes	C-UL US	Yes	Yes
CE - EU Yes Yes	CE - EU	Yes	Yes
WEEE - Directive of the European Union Yes Yes		Yes	Yes
RoHS Directive Yes Yes		Yes	Yes
RCM Yes Yes	RCM	Yes	Yes
US Patent	US Patent		

SpaceLogic Controllers MP-C and MP-V conform to the BACnet® Advanced Application Controller (B-AAC) profile at protocol revision 12 by the BACnet Testing Laboratories (BTL®). EcoStruxure solution installations or BMS transitions requiring UL-864 certifications must use the SpaceLogic Controller MP-V-xx-SMK (listed above).

Eco**£**truxure^{*}

SpaceLogic IP Controllers MP-C – Inputs and Outputs

	MP-C-15A	MP-C-18A	MP-C-18B	MP-C-24A	MP-C-36A
Part Number	SXWMPC15A10001	SXWMPC18A10001	SXWMPC18B10001	SXWMPC24A10001	SXWMPC36A10001
Other Models	MP-C-15A-SMK	MP-C-18A-SMK	MP-C-18B-SMK	MP-C-24A-SMK	MP-C-36A-SMK
Part Number (UL-864 Smoke Control)	SXWMPC15A1S001	SXWMPC18A1S001	SXWMPC18B1S001	SXWMPC24A1S001	SXWMPC36A1S001
Universal Inputs/Outputs	8-Ub	10-Ub	10-Ub	16-Ub, 4Uc	20-Ub, 8Uc
Digital Input	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Counter Input	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Supervised Input	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Voltage Input - (0-10V)	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Resistive Input	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Thermistor Input - 10k	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Thermistor Input - 1.8k	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Thermistor Input - 1k	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Thermistor Input - 20k	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Thermistor Input - 2.2k	Ub	Ub	Ub	Ub/Uc	Ub/Uc
RTD Temp Input - Pt100					
RTD Temp Input - Pt1000	Ub	Ub	Ub	Ub/Uc	Ub/Uc
RTD Temp Input - Ni1000	Ub	Ub	Ub	Ub/Uc	Ub/Uc
RTD Temp Input - LG-Ni1000	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Voltage Output (0-10V)	Ub	Ub	Ub	Ub/Uc	Ub/Uc
Current Output (0-20mA)				Uc	Uc
Digital Outputs	7	8	8	4	8
Form A Relay, SPST		3		4	8
Form C Relay, SPDT					
Triac	6	4	8		
Form A High Power Relay, SPST	1	1			

Key: Ub – Universal Type B, Uc – Universal Type C

SpaceLogic IP Controllers MP-V – Inputs and Outputs

	MP-V-7A	MP-V-9A
Part Number	SXWMPV7AX10001	SXWMPV9AX10001
Other Models	MP-V-7A-SMK	MP-V-9A-SMK
Part Number	SXWMPV7AX1S001	SXWMPV9AX1S001
(UL-864 Smoke Control) Universal Inputs	3	4
Digital Input	Yes	Yes
Counter Input	Yes	Yes
Supervised Input	Yes	Yes
Voltage Input - (0-10V)	Yes	Yes
Resistive Input	Yes	Yes
Thermistor Input - 10k	Yes	Yes
Thermistor Input - 1.8k	Yes	Yes
Thermistor Input - 1k	Yes	Yes
Thermistor Input - 20k	Yes	Yes
Thermistor Input - 2.2k	Yes	Yes
RTD Temp Input - Pt100		
RTD Temp Input - Pt1000	Yes	Yes
RTD Temp Input - Ni1000	Yes	Yes
RTD Temp Input - LG-Ni1000	Yes	Yes
Voltage Output (0-10V)	Yes	Yes
Current Output (0-20mA)		
Damper Position Feedback	Yes	Yes
Velocity Pressure Sensor	Yes	Yes
Digital Output	3	3
Form C Relay, SPDT		
Triac	Yes	Yes
Form A High Power Relay, SPST		
Analog Output	1	2
Voltage outputs (0-10 VDC)	Yes	Yes
Current Output (0-20 mA)	Yes	Yes
Damper Outputs		
Form K, Triac Voltage	Yes	Yes

SpaceLogic IP Controllers – IP-IO Series

As a network level IO resource the IP-IO Series is capable of sharing its local IO resources across one or multiple SpaceLogic Controllers or EcoStruxure Building Edge Servers over BACnet network.



Note: Screw terminals are prepopulated. Spare is available. See accessories section on page S6.

	IP-IO-DI10	IP-IO-UIO10	IP-IO-UIO5DOFA4
Part Number	SXWIPIOAA10001	SXWIPIOBA10001	SXWIPIOCA10001
Other Models	IP-IO-DI10-SMK	IP-IO-UIO10-SMK	IP-IO-UIO5DOFA4-SMK
Part Number (UL-864 Smoke Control)	SXWIPIOAA1S001	SXWIPIOBA1S001	SXWIPIOCA1S001
Communications			
Communication Interface	BACnet/IP, BTL B-AAC	BACnet/IP, BTL B-AAC	BACnet/IP, BTL B-AAC
Physical		450 ML 440 LL 04 D	450 M/ 440 H 04 D
Dimensions	153 W x 110 H x 64 D mm (6.0 W x 4.3 H x 2.5 D in.)	153 W x 110 H x 64 D mm (6.0 W x 4.3 H x 2.5 D in.)	153 W x 110 H x 64 D mm (6.0 W x 4.3 H x 2.5 D in.)
Weight (including terminal blocks)	0.358 kg (0.789 lb)	0.358 kg (0.789 lb)	0.358 kg (0.789 lb)
Power			
Power	24 VAC/DC	24 VAC/DC	24 VAC/DC
Consumption	9 W	9 W	9 W
Environmental			
Operating Range6	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) -40°C to 60°C (-40°F to 140°F) for rooftop	0°C to 50°C (32°F to 122°F) 0-95% RH (non-condensing) -40°C to 60°C (-40°F to 140°F) for rooftop
CPU Internals			
CPU	ARM Cortex-A7 dual-core	ARM Cortex-A7 dual-core	ARM Cortex-A7 dual-core
Memory	128 MB (DDR3 SDRAM)	128 MB (DDR3 SDRAM)	128 MB (DDR3 SDRAM)
Battery	No	No	No
Real time clock	Yes -7 days minimum	Yes -7 days minimum	Yes -7 days minimum
External Features			
Enclosure rating	Eco Friendly ABS/PC, UL94 5V, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5V, IP 20 (<12.5 mm protection)	Eco Friendly ABS/PC, UL94 5V, IP 20 (<12.5 mm protection)
Add-on HOA / Display	Add-On (see accessories)	Add-On (see accessories)	Add-On (see accessories)
Manual Override of Outputs	N/A	Yes	Yes
Digital Status LEDs	Yes	Yes	Yes
Intelligent Sensors	No	No	No
Sensor Bus	No	No	No
Terminals			
I/O terminals	Two-piece terminal	Two-piece terminal	Two-piece terminal
External Enclosure/Mounting			
Mounting	DIN-rail or wall mount	DIN-rail or wall mount	DIN-rail or wall mount
Certifications			
BTL	Yes	Yes	Yes
FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)
REACH	Yes	Yes	Yes
Innovation, Science and Economic Development Canada (ISED)	Class B (Emission)	Class B (Emission)	Class B (Emission)
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)
C-UL US	Yes	Yes	Yes
CE - EU	Yes	Yes	Yes
WEEE - Directive of the European Union	Yes	Yes	Yes
RoHS Directive	Yes	Yes	Yes
RCM	Yes	Yes	Yes
US Patent			

SpaceLogic Controllers - IP-IO Series is pending certification of the BACnet Application Specific Controller (B-ASC) profile at protocol revision 14 by the BACnet Testing Laboratories (BTL®).

SpaceLogic IP Controllers IP-IO – Inputs and Outputs

	IP-IO-DI10	IP-IO-UIO10	IP-IO-UIO5DOFA4
Part Number	SXWIPIOAA10001	SXWIPIOBA10001	SXWIPIOCA10001
Other Models	IP-IO-DI10-SMK	IP-IO-UIO10-SMK	IP-IO-UIO5DOFA4-SMK
Part Number (UL-864 Smoke Control)	SXWIPIOAA1S001	SXWIPIOBA1S001	SXWIPIOCA1S001
Digital Inputs	10		
Universal Inputs/Outputs		10-Ub	5-Ub
Digital Input		Ub	Ub
Counter Input		Ub	Ub
Supervised Input		Ub	Ub
Voltage Input - 0-10V		Ub	Ub
Resistive Input		Ub	Ub
Thermistor Input - 10k		Ub	Ub
Thermistor Input - 1.8k		Ub	Ub
Thermistor Input - 1k		Ub	Ub
Thermistor Input - 20k		Ub	Ub
Thermistor Input - 2.2k		Ub	Ub
RTD Temp Input - Pt100			
RTD Temp Input - Pt1000		Ub	Ub
RTD Temp Input - Ni1000			
RTD Temp Input - LG Ni1000		Ub	Ub
Voltage Output 0-10V		Ub	Ub
Current Output 0-20mA			
Digital Outputs			4
Form A Relay, SPST			3
Form C Relay, SPDT			
Triac			
Form A High Power Relay, SPST			1

Key: Ub – Universal Type B, Uc – Universal Type C

SpaceLogic IP Controllers (continued)

SpaceLogic IP Controllers – Accessories

The following accessories are available for the SpaceLogic Controllers.

Part Number	Product Name	Description
SXWMPCDSP10001	MP-C DISPLAY	MP-C override display module
SXWDINEND10001	DIN-RAIL-CLIP	DIN-rail end clip, package of 25 pieces
SXWMPVCON10001	MP-V Connector Kit	Spare screw terminals for all MP-V models
SXWMPCCON10001	MP-C Connector Kit	Spare screw terminals for all MP-C models
SXWBTAECXX10001	eCommission Bluetooth Adapter	



MP-C DISPLAY



······



SXWMPCCON10001

*Touch Display supports user access to the following settings: HVAC mode (Cooling/Heating/Auto), Setpoint adjust, Override and Fan (On/Off/Auto)

SpaceLogic IP Controllers – Accessories (continued)

Actassi Structured Cabling Solution

Actassi connectivity work seamlessly with SpaceLogic Controllers. Get simple installation and ease of engineering deployment with a single source for BMS and network cabling needs. These physical network infrastructure solutions offer reliable and scalable IP backbone that enable a responsive BMS network.

Part number	Region	Description (system)
Global		
ACTPG6TLU001	Global	Cat 6 field-term plug, UTP
ACTPG6PTU100	Global	Cat 6 pass-through plug, UTP, 100-pack
ACTTLCPT	Global	Actassi crimping tool
ACTPG5EPTU100	Global	Cat 5e pass-through plug, UTP, 100-pack
AMER		
ACT4P6UCP1ARXGR	AMER	Cat 6 cable, UTP, 1000 ft (305 m), CMP, green
ACTPC6UBCP30AGR	AMER	Cat 6 patch cord, UTP, 30 ft (9 m), CMP, green
ACTPC6UBCP50AGR	AMER	Cat 6 patch cord, UTP, 50 ft (15 m), CMP, green
ACTPC6UBCP70AGR	AMER	Cat 6 patch cord, UTP, 70 ft (21 m), CMP, green
ACTPC6UBCP90AGR	AMER	Cat 6 patch cord, UTP, 90 ft (27 m), CMP, green
ACT4P5EUCP1ARXGR	AMER	Cat 5e cable, UTP, 1000 ft (305 m), CMP, green
ACTPC5EUBCP30AGR	AMER	Cat 5e patch cord, UTP, 30 ft (9 m), CMP, green
ACTPC5EUBCP50AGR	AMER	Cat 5e patch cord, UTP, 50 ft (15 m), CMP, green
ACTPC5EUBCP70AGR	AMER	Cat 5e patch cord, UTP, 70 ft (21 m), CMP, green
ACTPC5EUBCP90AGR	AMER	Cat 5e patch cord, UTP, 90 ft (27 m), CMP, green
EMEA		
VDICD116118	EMEA	Cat 6 cable, UTP, 305 m (1000 ft), Euroclass D, green
ACTPC6UBLS100GR	EMEA	Cat 6 patch cord, UTP, 10 m (32 ft), LSZH, green
ACTPC6UBLS150GR	EMEA	Cat 6 patch cord, UTP, 15 m (49 ft), LSZH, green
ACTPC6UBLS200GR	EMEA	Cat 6 patch cord, UTP, 20 m (65 ft), LSZH, green
ACTPC6UBLS250GR	EMEA	Cat 6 patch cord, UTP, 25 m (82 ft), LSZH, green
VDICD115118	EMEA	Cat 5e cable, UTP, 305 m (1000 ft), Euroclass D, green
ACTPC5EUBLS100GR	EMEA	Cat 5e patch cord, UTP, 10 m (32 ft), LSZH, green
ACTPC5EUBLS150GR	EMEA	Cat 5e patch cord, UTP, 15 m (49 ft), LSZH, green
ACTPC5EUBLS200GR	EMEA	Cat 5e patch cord, UTP, 20 m (65 ft), LSZH, green
ACTPC5EUBLS250GR	EMEA	Cat 5e patch cord, UTP, 25 m (82 ft), LSZH, green
PACIFIC		
ACT4P6UCM3RBGR	PACIFIC	Cat 6 cable, UTP, 305 m (1000 ft), PVC, green
ACTPC6UBCM100GR	PACIFIC	Cat 6 patch lead, UTP, 10 m (32 ft), PVC, green
ACTPC6UBCM150GR	PACIFIC	Cat 6 patch lead, UTP, 15 m (49 ft), PVC, green
ACTPC6UBCM200GR	PACIFIC	Cat 6 patch lead, UTP, 20 m (65 ft), PVC, green
ACTPC6UBCM250GR	PACIFIC	Cat 6 patch lead, UTP, 25 m (82 ft), PVC, green
ACT4P5EUCM3RBGR	PACIFIC	Cat 5e cable, UTP, 305 m (1000 ft), PVC, green
ACTPC5EUBCM100GR	PACIFIC	Cat 5e patch lead, UTP, 10 m (32 ft), PVC, green
ACTPC5EUBCM150GR	PACIFIC	Cat 5e patch lead, UTP, 15 m (49 ft), PVC, green
ACTPC5EUBCM200GR	PACIFIC	Cat 5e patch lead, UTP, 20 m (65 ft), PVC, green
ACTPC5EUBCM250GR	PACIFIC	Cat 5e patch lead, UTP, 25 m (82 ft), PVC, green

a) Abbreviations: UTP (Unshielded Twisted Pair), CMP (Plenum-rated cable),

BACnet controllers



BACnet b3 Series

Schneider Electric's b3 controllers support the most advanced BACnet services, addressing all five interoperability areas: data sharing, scheduling, trending, alarming, and device management. Every BACnet controller in the b3 system is compliant with the ASHRAE standard and interoperate with third party BACnet devices.

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b3 Series Controllers



b3608 Local Controller



b3624 Local Controller



b3800 Local Controller

Part Number	b3608 b3624		b3800	
Communications				
Protocol	BACnet Open Protocol	BACnet Open Protocol	BACnet Open Protocol	
Communication Interface	MS/TP, 9600 -76,800 bit/s	MS/TP, 9600 -76,800 bit/s	MS/TP, 9600 -76,800 bit/s	
Software				
Programmability	Script Programmable	Script Programmable	Script Programmable	
Physical				
Dimensions			153 W x 229 H x 54 D mm (6.01 W x 9.03 H x 2.14 D in.)	
Weight (including baseplate)	0.54 kg (1.19 lb.)	0.54 kg (1.19 lb.)	0.61 kg (1.34 lb.)	
Power			24 VAC +10% -15%, 50/60 Hz	
Power	24 VAC +10% -15%, 50/60 Hz Class 2 limited power, 12-24 VDC (auto sensing AC/DC)	Class 2 limited power, 12-24 Class 2 limited power, 12-24 C		
Consumption	25 VA (3 A fuse overload MOV protected)	25 VA (3 A fuse overload MOV protected)	25 VA (3 A fuse overload MOV protected)	
Environmental				
Operating Range	0 °C to 49 °C (32 °F to 120 °F) 10-95% RH (non-condensing)	0 °C to 49 °C (32 °F to 120 °F) 10-95% RH (non-condensing)	-23 °C to 60 °C (-10 °F to 140 °F) 10-95% RH (non- condensing)	
CPU Internals	Matazala Oaldis oo hii 40	Matazala Oald6 - 00 Lit 40	Matamia Calific 00 Lit 40	
CPU	Motorola Coldfire 32-bit, 10 Mhz	Motorola Coldfire 32-bit, 10 Mhz	Motorola Coldfire 32-bit, 10 Mhz	
Memory	1 MB flash, 128 kB SRAM	1 MB flash, 128 kB SRAM	1 MB flash, 128 kB SRAM	
Battery	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	
Real time clock	Synchronized via BACnet service	Synchronized via BACnet service	Synchronized via BACnet service	
External Features				
Enclosure rating	UL94 5 V (Plenum rated), IP 10 (<50 mm protection)	UL94 5 V (Plenum rated), IP 10 (<50 mm protection)	UL94 5 V (Plenum rated), IP 10 (<50 mm protection)	
HOA Switches (DO/AO)	No	No	No	
Digital Status LEDs	No	No	Yes	
Display	No	No	No	
Intelligent Sensors	Smart Sensor	Smart Sensor	Smart Sensor	
Service Port	b3	b3	b3	
Terminals				
I/O Terminals	Fixed terminal	Fixed terminal	Fixed terminal	
I/O Expansion	No	No	No	
External Enclosure/Mounting	Open class (separate	Open class (separate	Open class (separate	
Enclosure class	enclosure required)	enclosure required)	enclosure required)	
Mounting	Wall mount	Wall mount	Wall mount	
Certifications				
BTL	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	
Industry Canada (IC)	ICES-003 (Emission)	ICES-003 (Emission)	ICES-003 (Emission)	
UL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL	
C-UL US	Yes	Yes	Yes	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the European Union	Yes	Yes	Yes	
RoHS Directive	Yes	Yes	Yes	
RCM	Yes	Yes	Yes	

b3 Series Controllers, continued



b3804 Local Controller



b3810 Local Controller



b3814 Local Controller

Part Number	b3804	b3810	b3814	
Communications				
Protocol	BACnet Open Protocol	BACnet Open Protocol	BACnet Open Protocol	
Communication Interface	MS/TP, 9600 -76,800 bit/s	MS/TP, 9600 -76,800 bit/s	MS/TP, 9600 -76,800 bit/s	
Software				
Programmability	Script Programmable	Script Programmable	Script Programmable	
Physical		· · · · · · · · · · · · · · · · · · ·		
Dimensions	153 W x 229 H x 54 D mm	184 W x 241 H x 54 D mm	184 W x 241 H x 54 D mm	
	(6.01 W x 9.03 H x 2.14 D in.)	(7.26 W x 9.51 H x 2.14 D in.)	(7.26 W x 9.51 H x 2.14 D in.)	
Weight (including baseplate)	0.61 kg (1.34 lb.)	0.75 kg (1.65 lb.)	0.75 kg (1.65 lb.)	
Power		04.14.0 . 40.94 . 45.94 . 50.00.11	04.14.0 × 4004 4504 50400.14	
Power	24 VAC +10% -15%, 50/60 Hz Class 2 limited power, 12-24 VDC (auto sensing AC/DC)	24 VAC +10% -15%, 50/60 Hz Class 2 limited power, 12-24 VDC (auto sensing AC/DC)	24 VAC +10% -15%, 50/60 Hz Class 2 limited power, 12-24 VDC (auto sensing AC/DC)	
Consumption	25 VA (3 A fuse overload MOV	30 VA (3 A fuse overload MOV	30 VA (3 A fuse overload MOV	
	protected)	protected)	protected)	
Environmental				
Operating Range	-23 °C to 60 °C (-10 °F to 140 °F) 10-95% RH (non- condensing)	0 °C to 49 °C (32 °F to 120 °F) 10-95% RH (non-condensing)	0 °C to 49 °C (32 °F to 120 °F) 10-95% RH (non-condensing)	
CPU Internals				
CPU	Motorola Coldfire 32-bit, 10 Mhz	Motorola Coldfire 32-bit, 10 Mhz	Motorola Coldfire 32-bit, 10 Mhz	
Memory	1 MB flash, 128 kB SRAM	1 MB flash, 256 kB SRAM	1 MB flash, 256 kB SRAM	
Battery	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	
Real time clock	Synchronized via BACnet Synchronized via BACnet service		Synchronized via BACnet service	
External Features				
Enclosure rating	UL94 5 V (Plenum rated), IP 10 (<50 mm protection)	UL94 5 V (Plenum rated), IP 10 (<50 mm protection)	UL94 5 V (Plenum rated), IP 1 (<50 mm protection)	
HOA Switches (DO/AO)	No	Yes - (8/0)	Yes - (4/4)	
Digital Status LEDs	Yes	Yes	Yes	
Display	No	No	No	
Intelligent Sensors	Smart Sensor	Smart Sensor	Smart Sensor	
Service Port	b3	b3		
Terminals				
I/O Terminals	Fixed terminal	Two-piece terminal	Two-piece terminal	
I/O Expansion	No	Up to 2 xP expansion modules	Up to 2 xP expansion module	
External Enclosure/Mounting	Open class (separate	Open class (separate	Open class (separate	
Enclosure class	enclosure required)	enclosure required)	enclosure required)	
Mounting	Wall mount	Wall mount	Wall mount	
Certifications				
BTL	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	
Industry Canada (IC)	ICES-003 (Emission)	ICES-003 (Emission)	ICES-003 (Emission)	
UL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	
C-UL US	Yes	Yes	Yes	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the European Union	Yes	Yes	Yes	
RoHS Directive	Yes	Yes	Yes	
RCM	Yes	Yes	Yes	

b3 Series

b3 Series Controllers, continued



b3850 Fan Coil, Heat Pump, VAV Zone Controller



b3851 Fan Coil & Heat Pump Zone Controller



b3853 Fan Coil, Heat Pump, Dual VAV Zone Controller

Part Number	b3850 b3851		b3853	
Communications				
Protocol	BACnet Open Protocol	BACnet Open Protocol	BACnet Open Protocol	
Communication Interface	MS/TP, 9600 -76,800 bit/s	MS/TP, 9600 -76,800 bit/s	MS/TP, 9600 -76,800 bit/s	
Software				
Programmability	Script Programmable	Script Programmable	Script Programmable	
Physical		· · · · · · · · · · · · · · · · · · ·		
Dimensions			207 W x 139 H x 62 D mm (8.16 W x 5.47 H x 2.44 D in.)	
Weight (including baseplate)	0.51 kg (1.08 lb)	0.51 kg (1.08 lb)	0.51 kg (1.08 lb)	
Power				
Power	24 VAC +10% -15%, 50/60Hz Class 2 limited power	24 VAC +10% -15%, 50/60Hz Class 2 limited power	24 VAC +10% -15%, 50/60Hz Class 2 limited power	
Consumption	20 VA (2A fuse overload MOV protected)	20 VA (2A fuse overload MOV protected)	20 VA (2A fuse overload MOV protected)	
Environmental				
Operating Range	0°C to 49°C (32°F to 120°F) 10-95% RH (non-condensing)	0°C to 49°C (32°F to 120°F) 10-95% RH (non-condensing)	0°C to 49°C (32°F to 120°F) 10-95% RH (non-condensing)	
CPU Internals				
CPU			Motorola Coldfire 32-bit, 10Mhz	
Memory	1 MB flash, 128 kB SRAM	1 MB flash, 128 kB SRAM	1 MB flash, 128 kB SRAM	
Battery	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	Replaceable, non- rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	
Real time clock	Synchronized via BACnet service	Synchronized via BACnet service	Synchronized via BACnet service	
External Features				
Enclosure rating	UL94 5V (Plenum rated), IP 10 (<50 mm protection)	UL94 5V (Plenum rated), IP 10 (<50 mm protection)	UL94 5V (Plenum rated), IP 10 (<50 mm protection)	
HOA Switches (DO/AO)	No	No	No	
Digital Status LEDs	No	No	No	
Display	Option - xP Display	Option - xP Display	Option - xP Display	
Intelligent Sensors	Smart Sensor	Smart Sensor	Smart Sensor	
Service Port	b3	b3	b3	
Terminals I/O Terminals	Fixed terminal	Fixed terminal	Fixed terminal	
I/O Expansion	Up to 2 xP expansion modules	Up to 2 xP expansion modules	Up to 2 xP expansion modules	
External Enclosure/Mounting				
Enclosure class	Open class (separate enclosure required)	Open class (separate enclosure required)	Open class (separate enclosure required)	
Mounting	Wall mount	Wall mount	Wall mount	
Certifications				
BTL	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	
Industry Canada (IC)	ICES-003 (Emission)	ICES-003 (Emission)	ICES-003 (Emission)	
UL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL	UL-916 (Energy Management Equipment)	
C-UL US	Yes	Yes	Yes	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the European Union	Yes	Yes	Yes	
RoHS Directive	Yes	Yes	Yes	
RCM	Yes	Yes	Yes	

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b3 Series Controllers, continued



b3865-V VAV Zone Controller



b3866-V VAV Zone Controller



b3867 Terminal Controller

Part Number	b3866-V	b3867
Communications		
Protocol	BACnet Open Protocol	BACnet Open Protocol
Communication Interface	MS/TP, 9600 -76,800 bit/s	MS/TP, 9600 -76,800 bit/s
Software		
Programmability	Script Programmable	Script Programmable
Physical		
Dimensions	159 W x 197 H x 63 D mm (6.25 W x 7.75 H x 2.50 D in.)	157 W x 89 H x 64 D mm (6.20 W x .3.50 H x 2.50 D in.)
Weight (including baseplate)	1.04 kg (2.50 lb.)	0.29 kg (0.64 lb.)
Power		
Power	24 VAC +10% -15%, 50/60 Hz Class 2 limited power	24 VAC +10% -15%, 50/60 Hz Class 2 limited power
Consumption	<10 VA (fused overload MOV protected)	4 VA (2 A fuse overload MOV protected)
Environmental		
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 10- 90% RH (non-condensing)	0 °C to 49 °C (32 °F to 120 °F) 10- 95% RH (non-condensing)
CPU Internals		
CPU	Motorola Coldfire 32-bit, 10 Mhz	Motorola Coldfire 32-bit, 10 Mhz
Memory	512 kB flash, 128 kB SRAM, programs/data max 56 kB, parameters 64 kB	1 MB flash, 128 kB SRAM
Battery	Replaceable, rechargeable battery. Provides 30 days typical accumulated power failure backup of RAM memory. All data stored in Flash on power loss.	Replaceable, non-rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.
Real time clock	No	Synchronized via BACnet service
External Features		
Enclosure rating	N/A	UL94 5 V (Plenum rated), IP 10 (<50 mm protection)
HOA Switches (DO/AO)	No	No
Digital Status LEDs	No	No
Display	No	No
Intelligent Sensors	Smart Sensor	Smart Sensor
Service Port	b3	b3
Terminals	Two piece terminal	Two wines to minut
I/O Terminals I/O Expansion	Two-piece terminal No	Two-piece terminal No
External Enclosure/Mounting		
Enclosure class	Open class (separate enclosure required)	Open class (separate enclosure required)
Mounting	Wall mount	Wall mount
Certifications		
BTL	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	BTL: BACnet Advanced Application Controllers (B-AAC) with trending
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)
Industry Canada (IC)	ICES-003 (Emission)	ICES-003 (Emission)
UL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL
C-UL US	Yes	Yes
CE - EU	Yes	Yes
WEEE - Directive of the European Union	Yes	Yes
RoHS Directive	Yes	Yes
RCM	Yes	Yes

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b3 Series Controllers, continued



b3885-V VAV Zone Controller



b3887 (without enclosure) Terminal Controller



b3887-L-230 Terminal Controller

Part Number	b3885-V	b3887	
Communications			
Protocol	BACnet Open Protocol	BACnet Open Protocol	
Communication Interface	MS/TP, 9600 -76,800 bit/s	MS/TP, 9600 -76,800 bit/s	
Software			
Programmability	Script Programmable	Script Programmable	
Physical			
Dimensions	159 W x 197 H x 63 D mm (6.25 W x 7.75 H x 2.50 D in.)	130 W x 111 H x 30 D mm (5.13 W x 4.40 H x 1.15 D in.)	
Weight (including baseplate)	1.04 kg (2.50 lb.)	0.23 kg (0.50 lb.)	
Power			
Power	24 VAC +10% -15%, 50/60 Hz Class 2 limited power	24 VAC +10% -15%, 50/60 Hz Class 2 limited power	
Consumption	<10 VA (fused overload MOV protected)	10 VA (1 A fuse overload MOV protected)	
Environmental			
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 10- 90% RH (non-condensing)	0 °C to 49 °C (32 °F to 120 °F) 10- 95% RH (non-condensing)	
CPU Internals			
CPU	Motorola Coldfire 32-bit, 10 Mhz	Motorola Coldfire 32-bit, 10 Mhz	
Memory	512 kB flash, 128 kB SRAM, programs/data max 56 kB, parameters 64 kB	1 MB flash, 512 kB SRAM	
Battery	Replaceable, rechargeable battery. Provides 30 days typical accumulated power failure backup of RAM memory. All data stored in Flash on power loss.	Replaceable, non-rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.	
Real time clock	No	Synchronized via BACnet service	
External Features			
Enclosure rating	N/A	UL94 5 V (Plenum rated), IP 10 (<50 mm protection)	
HOA Switches (DO/AO)	No	No	
Digital Status LEDs	No	No	
Display	No	No	
Intelligent Sensors	Smart Sensor	Smart Sensor	
Service Port Terminals	b3	b3	
I/O Terminals	Two-piece terminal	Fixed terminal	
I/O Expansion	No	No	
External Enclosure/Mounting	-		
Enclosure class	Open class (separate enclosure required)	Open class (separate enclosure required)	
Mounting	Wall mount	Wall mount	
Certifications			
BTL	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	BTL: BACnet Advanced Application Controllers (B-AAC) with trending	
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	
Industry Canada (IC)	ICES-003 (Emission)	ICES-003 (Emission)	
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	
C-UL US	Yes	Yes	
CE - EU	Yes	Yes	
WEEE - Directive of the European Union	Yes	Yes	
RoHS Directive	Yes	Yes	
RCM	Yes	Yes	

b3 Series Controllers, continued



b3887-L-115-C, b3887-L-230-C Terminal Controllers



b3920 System Controller

Part Number	b3920, b3920-D
Communications	
Protocol	BACnet Open Protocol
Communication Interface	MS/TP, 9600 -76,800 bit/s
Software	
Programmability	Script Programmable
Physical	
Dimensions	270.8 W x 330.2 H x 69.0 D mm (10.66 W x 13.00 H x 2.72 D in.)
Weight (including baseplate)	1.58 kg (3.50 lb.)
Power	
Power	115/230 VAC +10% -15%, 50/60 Hz
Consumption	45 VA (3 A fuse overload MOV protected)
Environmental	
Operating Range	0 °C to 49 °C (32 °F to 120 °F) 10- 95% RH (non-condensing)
CPU Internals	
CPU	Motorola Coldfire 32-bit, 10 Mhz
Memory	2 MB flash, 1 MB SRAM
Battery	Replaceable, non-rechargeable lithium battery. Provides 5 years typical accumulated power failure backup of RAM memory.
Real time clock	Synchronized via BACnet service
External Features	
Enclosure rating	UL94 5 V (Plenum rated), IP 10 (<50 mm protection)
HOA Switches (DO/AO)	Yes - (8/8)
Digital Status LEDs	Yes
Display	Option - xP Display
Intelligent Sensors	Smart Sensor b3
Service Port Terminals	D3
I/O Terminals	Two-piece terminal
I/O Expansion	Up to 2 xP expansion modules
External Enclosure/Mounting	
Enclosure class	Open class (separate enclosure required)
Mounting	Wall mount
Certifications	
BTL	BTL: BACnet Advanced Application Controllers (B-AAC) with trending
FCC	47 CFR § 15, Class A (Emission)
Industry Canada (IC)	ICES-003 (Emission)
UL	UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL
C-UL US	Yes
CE - EU	Yes
WEEE - Directive of the European Union	Yes
RoHS Directive	Yes
RCM	Yes

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b3 Series xP Expansion I/O Modules



xPDI8 8 Channel Digital Output Expansion Module



xPUI4 4 Channel Universal Input Expansion Module



xPDO2 2 Channel Digital Output Expansion Module

Part Number	xPDI8	xPUI4
Communications		
Protocol	xP Bus	xP Bus
Physical		
Dimensions	180 W x 82 H x 41 D mm (7.10 W x 3.21 H x 1.60 D in.)	180 W x 82 H x 41 D mm (7.10 W x 3.21 H x 1.60 D in.)
Weight (including baseplate)	0.22 kg (0.48 lb.)	0.22 kg (0.48 lb.)
Power		
Power	From xP bus with 400 mA power supply	From xP bus with 400 mA power supply
Consumption	25 mA	50 mA
Environmental		
Operating Range	0 °C to 49 °C (32 °F to 120 °F) 10- 95% RH (non-condensing)	0 °C to 49 °C (32 °F to 120 °F) 10- 95% RH (non-condensing)
External Features		
Enclosure rating	UL94 5VB, IP 10 (<50 mm protection)	UL94 5VB, IP 10 (<50 mm protection)
HOA Switches (DO/AO)	No	No
Digital Status LEDs	Yes	Yes
Terminals		
	- · · · ·	
I/O Terminals	Two-piece terminal	Two-piece terminal
I/O Terminals	N/A	N/A
	· · · ·	
I/O Expansion	· · · ·	
I/O Expansion External Enclosure/Mounting	N/A Open class (separate enclosure	N/A Open class (separate enclosure
I/O Expansion External Enclosure/Mounting Enclosure class	N/A Open class (separate enclosure required)	N/A Open class (separate enclosure required)
I/O Expansion External Enclosure/Mounting Enclosure class Mounting	N/A Open class (separate enclosure required)	N/A Open class (separate enclosure required)
I/O Expansion External Enclosure/Mounting Enclosure class Mounting Certifications	N/A Open class (separate enclosure required) Wall mount	N/A Open class (separate enclosure required) Wall mount
I/O Expansion External Enclosure/Mounting Enclosure class Mounting Certifications BTL	N/A Open class (separate enclosure required) Wall mount	N/A Open class (separate enclosure required) Wall mount No
I/O Expansion External Enclosure/Mounting Enclosure class Mounting Certifications BTL FCC	N/A Open class (separate enclosure required) Wall mount No 47 CFR § 15, Class A (Emission)	N/A Open class (separate enclosure required) Wall mount No 47 CFR § 15, Class A (Emission)
I/O Expansion External Enclosure/Mounting Enclosure class Mounting Certifications BTL FCC Industry Canada (IC)	N/A Open class (separate enclosure required) Wall mount No 47 CFR § 15, Class A (Emission) ICES-003 (Emission) UL-916 (Energy Management Equipment), UL-864 (Smoke	N/A Open class (separate enclosure required) Wall mount No 47 CFR § 15, Class A (Emission) ICES-003 (Emission) UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System
I/O Expansion External Enclosure/Mounting Enclosure class Mounting Certifications BTL FCC Industry Canada (IC) UL	N/A Open class (separate enclosure required) Wall mount No 47 CFR § 15, Class A (Emission) ICES-003 (Emission) UL-916 (Energy Management Equipment), UL-864 (Smoke control System Equipment) UUKL	N/A Open class (separate enclosure required) Wall mount Wall mount No 47 CFR § 15, Class A (Emission) ICES-003 (Emission) UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL
I/O Expansion External Enclosure/Mounting Enclosure class Mounting Certifications BTL FCC Industry Canada (IC) UL C-UL US	N/A Open class (separate enclosure required) Wall mount No 47 CFR § 15, Class A (Emission) ICES-003 (Emission) UL-916 (Energy Management Equipment), UL-864 (Smoke Control System Equipment) UUKL Yes	N/A Open class (separate enclosure required) Wall mount Wall mount No 47 CFR § 15, Class A (Emission) ICES-003 (Emission) UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL Yes
I/O Expansion External Enclosure/Mounting Enclosure class Mounting Certifications BTL FCC Industry Canada (IC) UL C-UL US CE - EU WEEE - Directive of the	N/A Open class (separate enclosure required) Wall mount No 47 CFR § 15, Class A (Emission) ICES-003 (Emission) UL-916 (Energy Management Equipment), UL-864 (Smoke Control System Equipment) UUKL Yes	N/A Open class (separate enclosure required) Wall mount Wall mount No 47 CFR § 15, Class A (Emission) ICES-003 (Emission) UL-916 (Energy Management Equipment), Optional UL- 864 (Smoke Control System Equipment) UUKL Yes Yes

b3 Series xP Expansion I/O Modules, continued



xPDO4 4 Channel Digital Output Expansion Module



xPAO2 2 Channel Analog Output Expansion Module



xPAO4 4 Channel Analog Output Expansion Module

Part Number	xPDO4 xPAO2		xPAO4	
Communications				
Protocol	xP Bus	xP Bus	xP Bus	
Physical				
Dimensions	180 W x 82 H x 41 D mm (7.10 W x 3.21 H x 1.60 D in.)	180 W x 82 H x 41 D mm (7.10 W x 3.21 H x 1.60 D in.)	180 W x 82 H x 41 D mm (7.10 W x 3.21 H x 1.60 D in.)	
Weight (including baseplate)	0.22 kg (0.48 lb.)	0.22 kg (0.48 lb.)	0.22 kg (0.48 lb.)	
Power				
Power	From xP bus with 400 mA power supply	From xP bus with 400 mA power supply	From xP bus with 400 mA power supply	
Consumption	100 mA	80 mA	120 mA	
Environmental				
Operating Range	0 °C to 49 °C (32 °F to 120 °F) 10-95% RH (non-condensing)	0 °C to 49 °C (32 °F to 120 °F) 10-95% RH (non-condensing)	0 °C to 49 °C (32 °F to 120 °F) 10-95% RH (non-condensing)	
External Features				
Enclosure rating	UL94 5VB, IP 10 (<50 mm protection)	UL94 5VB, IP 10 (<50 mm protection)	UL94 5VB, IP 10 (<50 mm protection)	
HOA Switches (DO/AO)	Yes - (4/0)	Yes - (0/2)	Yes - (0/4)	
Digital Status LEDs	Yes	Yes	Yes	
Terminals				
I/O Terminals	Two-piece terminal	Two-piece terminal Two-piece terminal		
I/O Expansion	N/A	N/A	N/A	
External Enclosure/Mounting				
Enclosure class	Open class (separate enclosure required)	Open class (separate enclosure required)	Open class (separate enclosure required)	
Mounting	Wall mount	Wall mount	Wall mount	
Certifications				
BTL	No	No	No	
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)	
Industry Canada (IC)	ICES-003 (Emission)	ICES-003 (Emission)	ICES-003 (Emission)	
UL	UL-916 (Energy Management Equipment), UL-864 (Smoke Control System Equipment) UUKL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	
C-UL US	Yes	Yes	Yes	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the European Union	Yes	Yes	Yes	
RoHS Directive	Yes	Yes	Yes	
RCM	Yes	Yes	Yes	

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b3 Series Controllers – Inputs and Outputs

Part Number	b3608	b3624	b3800	b3804	b3810	b3814
Universal Inputs	8	24	8	8	8	8
Digital Contact	•	•	•	•	•	•
Digital Counter - Low Speed	•	•	•	•	•	•
Digital Counter - Medium Speed						
Digital Counter - High Speed						
Digital Supervised	•	•	•	•	•	•
Analog Voltage - 0-1 V						
Analog Voltage - 0-5 V	•	•	•	•		
Analog Voltage - 0-10 V					•	•
Analog Voltage - 2-10 V						
Analog Current - 0-20 mA						
Analog Current - 4-20 mA	•	•	•	•	•	•
Analog Resistance						
Analog Thermistor - 10 k	•	•	•	•	•	•
Analog Thermistor - 1.8 k						
Analog Thermistor - 1 k						
Analog Inputs						
Voltage - 0-5 V						
Voltage - 0-10 V						
Velocity Pressure						
Analog Thermistor - 10 k						
Analog Thermistor - 1.8 k						
Analog Thermistor - 1 k						
Digital Outputs			8	4	8	4
Form A, SPST						
Form C, SPDT			•	•	•	•
Triac						
Analog Outputs				4		4
Voltage - 0-10 V				•		•
Current - 0-20 mA						•
Damper Outputs						
Form K, Triac						
Voltage						
Intelligent Sensors	1	1	1	1	1	1
Smart Sensor (b3)	•	•	•	•	•	•



b3 Series Controllers – Inputs and Outputs, continued

Part Number	b3850	b3851	b3853	b3866-V	b3867
Universal Inputs	4	4	4	4	4
Digital Contact	•	•	•	•	•
Digital Counter - Low Speed	•	•	•	•	•
Digital Counter - Medium Speed					
Digital Counter - High Speed					
Digital Supervised	•	•	•	•	•
Analog Voltage - 0-1 V					
Analog Voltage - 0-5 V	•	•	•	•	•
Analog Voltage - 0-10 V					
Analog Voltage - 2-10 V					
Analog Current - 0-20 mA	•	•	•		
Analog Current - 4-20 mA				•	•
Analog Resistance					
Analog Thermistor - 10 k	•	•	•	•	•
Analog Thermistor - 1.8 k					
Analog Thermistor - 1 k					
Analog Inputs	1		2	1	
Voltage - 0-5 V					
Voltage - 0-10 V					
Velocity Pressure	internal		internal	internal	
Analog Thermistor - 10 k					
Analog Thermistor - 1.8 k					
Analog Thermistor - 1 k					
Digital Outputs	4	4	4	3	5
Form A, SPST	3ch	3ch	3ch		
Form C, SPDT					
Triac	1ch	1ch	1ch	•	•
Analog Outputs				2	2
Voltage - 0-10 V				•	•
Current - 0-20 mA					
Damper Outputs				1	
Form K, Triac					
Voltage				internal	
Intelligent Sensors	1	1	1	1	1
Smart Sensor (b3)	•	•	•	•	•



b3 Series Controllers – Inputs and Outputs, continued

Part Number	b3885-V	b3887	b3920, b3920-D
Universal Inputs	2	3	16
Digital Contact	•	•	•
Digital Counter - Low Speed		•	•
Digital Counter - Medium Speed			
Digital Counter - High Speed	•		
Digital Supervised	•	•	•
Analog Voltage - 0-1 V			
Analog Voltage - 0-5 V	٠	•	
Analog Voltage - 0-10 V			•
Analog Voltage - 2-10 V			
Analog Current - 0-20 mA			
Analog Current - 4-20 mA	•	•	•
Analog Resistance			
Analog Thermistor - 10 k	٠	•	•
Analog Thermistor - 1.8 k			
Analog Thermistor - 1 k			
Analog Inputs	1		
Voltage - 0-5 V			
Voltage - 0-10 V			
Velocity Pressure	internal		
Analog Thermistor - 10 k			
Analog Thermistor - 1.8 k			
Analog Thermistor - 1 k			
Digital Outputs	2	5	8
Form A, SPST		1 channel	
Form C, SPDT			•
Triac	•	4 channel	
Analog Outputs			8
Voltage - 0-10 V			•
Current - 0-20 mA			•
Damper Outputs	1		
Form K, Triac	internal		
Voltage			
Intelligent Sensors	1	1	1
Smart Sensor (b3)	•	•	•

b3 Series xP Expansion I/O Modules – Inputs and Outputs

Part Number	xPDI8	xPUI4	xPDO4	xPAO2	xPAO4
Universal Inputs		4			
Digital Contact		•			
Digital Counter - Low Speed		3 channel			
Digital Counter - Medium Speed					
Digital Counter - High Speed		1 channel			
Digital Supervised		•			
Analog Voltage - 0-1 V					
Analog Voltage - 0-5 V		•			
Analog Voltage - 0-10 V					
Analog Voltage - 2-10 V					
Analog Current - 0-20 mA					
Analog Current - 4-20 mA		•			
Analog Resistance					
Analog Thermistor - 10 k		•			
Analog Thermistor - 1.8 k					
Analog Thermistor - 1 k					
Digital Inputs	8				
Digital Contact	٠				
Counter - Low Speed					
Counter - Medium Speed					
Counter - High Speed	٠				
Digital Outputs			4		
Form A, SPST					
Form C, SPDT			•		
Triac					
Analog Outputs				2	4
Voltage - 0-10 V				•	•
Current - 0-20 mA				•	•

The PCS enables offline engineering and project configuration of EcoStruxure Building Operation without the need for live equipment or for an engineer or technician to be onsite. Save time and reduce costs by engineering automation servers and the Enterprise Server offline and later deploying when live onsite.

Search keyword: Project Configuration Server

MNB Series

Now native in EcoStruxure solution, the MNB series of MicroNet controllers are designed in accordance with BACnet[®] standards. When programmed or loaded with a pre-engineered application, these controllers provide control for packaged rooftops, heat pumps, fan coils, unit ventilators, and similar applications.

MNB Series Controllers



MNB-1000



MNB-300

Part Number	MNB-70	MNB-300	MNB-1000
Communications			
Protocol	BACnet Open Protocol	BACnet Open Protocol	BACnet Open Protocol
Communication Interface	MS/TP, 9600-76,800 bit/s	MS/TP, 9600-76,800 bit/s	MS/TP, 9600-76,800 bit/s
Software			
Preloaded Application/ASC	No	No	No
Programability	WorkPlace Tech programmable	WorkPlace Tech programmable	WorkPlace Tech programmable
Physical			
Dimensions	127 W x 92 H x 41 D mm (5 W x 3.625 H x 1.594 D in.)	178 W x 100 H x 56 D mm (7.0 W x 3.94 H x 2.19 D in.)	213 W x 278 H x 58 D mm (8.375 W x 10.937 H x 2.281 D in.)
Weight (including baseplate)	1.1 lb.	1.5 lb	3.95 lb.
Power			
Power	20.4 to 30 VAC, 50/60Hz	20.4 to 30 VAC, 50/60Hz	20.4 to 30 VAC, 50/60Hz
Consumption	15 VA (plus DO loads)	16VA	50VA
Environmental			
Operating Range	0°C to 55°C (32°F to 131°F)	-40°C to 60°C (-40°F to 140°F)	-40°C to 60°C (-40°F to 140°F)
CPU Internals	5-95% RH (non-condensing)	5-95% RH (non-condensing)	5-95% RH (non-condensing)
CPU	8 Bit	8 Bit	32 Bit
	"Flash: 256K	"Flash: 256K	"DDR: 64M
Memory	EEPROM: 4K"	EEPROM: 4K"	NOR Flash: 16M"
Battery	N/A	N/A	72 hour
Real time clock	N/A	N/A	Yes
External Features			
Enclosure rating	NEMA-1, UL94 5V (Plenum rated)	N/A	N/A
HOA Switches (DO/AO)	No	No	No
Digital Status LEDs	Yes	Yes	Yes
Display	Via S-Link Sensor	Via S-Link Sensor	Via S-Link Sensor
Intelligent Sensors	Sensor Link (S-Link)	Sensor Link (S-Link)	Sensor Link (S-Link)
Service Port	MS/TP jack on controller	MS/TP jack on controller	MS/TP jack on controller
Terminals			
I/O Terminals	Fixed terminal	Fixed terminal	Fixed terminal
I/O Expansion	No	No	Up to 8 MNB-15s, each with 15 I/O points
A/D Conversion - Inputs	12-bit	12-bit	12-bit
A/D Conversion - Outputs	8-bit	8-bit	8-bit
External Enclosure/Mounting			
Enclosure class	N/A	NEMA-1	NEMA-1
Conduit knockouts	No	Yes	Yes
Mounting	Panel Mount	Panel Mount	Panel Mount
Certifications			
BTL	BTL: BACnet Application Specific Controller (B-ASC)	BTL: BACnet Application Specific Controller (B-ASC)	BTL: BACnet Application Specific Controller (B-ASC)
FCC	Part 15, Class A	Part 15, Class A	Part 15, Class A
Industry Canda (IC)	CAN/CSA 22.2, ULC/ ORD-C100-92, CAN- ULC-S527	CAN/CSA 22.2, ULC/	CAN/CSA 22.2, ULC/ ORD-C100-92, CAN-ULC-S527
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment), UL-864 (Smoke Control)	UL-916 (Energy Management Equipment), UL-864 (Smoke Control)
C-UL US	UL Listed to Canadian Safety Standards (CAN/CSA 22.2).	UL Listed to Canadian Safety Standards (CAN/CSA 22.2).	UL Listed to Canadian Safety Standards (CAN/CSA 22.2).
CE - EU	89/336/EEC, EN61326	89/336/EEC, EN61326	89/336/EEC, EN61326
WEEE - Directive of the European Union	2012/19/EU	2012/19/EU	2012/19/EU
RoHS Directive	RoHS II	RoHS II	RoHS II
RCM	Yes	Yes	Yes

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MNB Series Controllers, continued



MNB-V1



MNB-V2

Part Number	MNB-1000-15	MNB-V1-2	MNB-V2-2
Communications			
Protocol	Modbus	BACnet Open Protocol	BACnet Open Protocol
Communication Interface	RS-485	MS/TP, 9600-76,800 bit/s	MS/TP, 9600-76,800 bit/s
Software			
Preloaded Application/ASC	No	No	No
Programability	Program resides on parent	WorkPlace Tech programmable	WorkPlace Tech programmable
Physical	controller		
Dimensions	178 W x 100 H x 56 D mm	"159 W x 197 H x 63 D mm	"159 W x 197 H x 63 D mm
	(7.0 W x 3.94 H x 2.19 D in.)	(6.25 W x 7.75 H x 2.50 D in.)"	(6.25 W x 7.75 H x 2.50 D in.)"
Weight (including baseplate)	1.5 lb.	2.68 lb.	2.65 lb.
Power			
Power	20.4 to 30 VAC, 50/60Hz	20.4 to 30 VAC, 50/60Hz	20.4 to 30 VAC, 50/60Hz
Consumption	16VA	15VA	15VA
Environmental			000 10 5500 (0005 10 40405)
Operating Range	-40°C to 60°C (-40°F to 140°F) 5-95% RH (non-condensing)		0°C to 55°C (32°F to 131°F) 5-95% RH (non-condensing)
CPU Internals			
CPU	8 Bit	8 Bit	8 Bit
Memory	"Flash: 256K	"Flash: 256K	"Flash: 256K
Battery	EEPROM: 4K" N/A	EEPROM: 4K" N/A	EEPROM: 4K" N/A
Real time clock	N/A	N/A N/A	N/A N/A
External Features	N/A		
Enclosure rating	N/A	UL94 5V (Plenum rated)	UL94 5V (Plenum rated)
HOA Switches (DO/AO)	No	No	No
Digital Status LEDs	Yes	Yes	Yes
Display	No	Via S-Link Sensor	Via S-Link Sensor
Intelligent Sensors	No	Sensor Link (S-Link)	Sensor Link (S-Link)
Service Port	No	MS/TP jack on controller	MS/TP jack on controller
Terminals			
I/O Terminals	Fixed terminal	Fixed terminal	Fixed terminal
I/O Expansion	No	No	No
A/D Conversion - Inputs	12-bit	12-bit	12-bit
A/D Conversion - Outputs	8-bit	N/A	8-bit
External Enclosure/Mounting			
Enclosure class	NEMA-1	NEMA-1	NEMA-1
Conduit knockouts	Yes	Yes	Yes
Mounting	Panel Mount	Shaft mount	Shaft mount
Certifications			
BTL	N/A	BTL: BACnet Application Specific Controller (B-ASC)	BTL: BACnet Application Specific Controller (B-ASC)
FCC	Part 15, Class A	Part 15, Class A	Part 15, Class A
Industry Canada (IC)	CAN/CSA 22.2	CAN/CSA 22.2, ULC/ ORD-C100-92, CAN- ULC-S527	CAN/CSA 22.2, ULC/ ORD-C100-92, CAN- ULC-S527
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment), UL-864 (Smoke Control)	UL-916 (Energy Management Equipment), UL-864 (Smoke Control)
C-UL US	UL Listed to Canadian Safety Standards (CAN/CSA 22.2).	UL Listed to Canadian Safety Standards (CAN/CSA 22.2).	UL Listed to Canadian Safety Standards (CAN/CSA 22.2).
CE - EU	89/336/EEC, EN61326	89/336/EEC, EN61326	89/336/EEC, EN61326
WEEE - Directive of the European Union	2012/19/EU	2012/19/EU	2012/19/EU
RoHS Directive	RoHS II	RoHS II	RoHS II
RCM	Yes	Yes	Yes

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MNB Series Controllers – Inputs and Outputs

Universal inputs3612633Digital Counter - Low Speed <td< th=""><th>Base Part Number</th><th>MNB-70</th><th>MNB-300</th><th>MNB-1000</th><th>MNB-1000-15</th><th>MNB-V1-2</th><th>MNB-V2-2</th></td<>	Base Part Number	MNB-70	MNB-300	MNB-1000	MNB-1000-15	MNB-V1-2	MNB-V2-2
Diplical Control. we speed <td>Universal Inputs</td> <td>3</td> <td>6</td> <td>12</td> <td>6</td> <td>3</td> <td>3</td>	Universal Inputs	3	6	12	6	3	3
Diplia Counter - Nav SpeedDiplia Counter - Nav SpeedDiplia Counter - Nav SpeedDiplia Counter - Nav SpeedAnaloy Notage - 6-WAnaloy Courant - 6-SamAAnaloy Courant - 7.8KAnaloy Thermistor - 7.8K<							
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Analog Current - 4-20mAImage: Current - 4-20mAImage: Current - 4-20mAAnalog ResistanceImage: Current - 10kImage: Current - 10kAnalog Thermistor - 10kImage: Current - 10kImage: Current - 10kAnalog Thermistor - 1kImage: Current - 10kImage: Current - 10kDigital Outputs3686SPSTImage: Current - 10kImage: Current - 10kImage: Current - 10kTriacImage: Current - 0-20mAImage: Current - 10kImage: Current - 10kDamper OutputsImage: Current - 10kImage: Current - 10kImage: Current - 10k	Analog Voltage - 2-10V						
Analog ResistanceImage: Constraint of the state of the sta		•	•	•	•		•
Analog Thermistor - 10k Image Control Co	Analog Current - 4-20mA						
Analog Thermistor - 1.8k Image Control (Control (Contro) (Contro) (Control (Control (Control (Control (Contro)	Analog Resistance						
Analog Thermistor - 1k Image: Constraint of the state of	Analog Thermistor - 10k						
Digital Outputs 3 6 8 6 3 Form A, SPST	Analog Thermistor - 1.8k						
Form A, SPST Image: Constraint of the system o	Analog Thermistor - 1k						
Form C, SPDT Image: Contract of the second sec	Digital Outputs	3	6	8	6		3
Triac Image: Constraint of the second of t	Form A, SPST						
Analog Outputs Voltage - 0-10V Current - 0-20mA Damper Outputs 1	Form C, SPDT						
Voltage - 0-10V Current - 0-20mA Damper Outputs 1 1	Triac	•	•	•	•		•
Current - 0-20mA 1 1 Damper Outputs 1 1	Analog Outputs						
Damper Outputs 1 1	Voltage - 0-10V						
	Current - 0-20mA						
Form K. Triac internal internal	Damper Outputs					1	1
internal internal	Form K, Triac					internal	internal
Voltage							
Intelligent Sensors							
S-Link (MN-Sx for MNB)		•		•		•	•

LonWorks Controllers

Xenta Series

Xenta series controllers and I/O modules provide an open and flexible system architecture and access to standardized LonWorks-based network technology.

Xenta Series Controllers



Xenta 102-ES VAV Zone Controller



Xenta 102-AX VAV Zone Controller

	102-ES	102-AX
Part Number	007305370	007305401
Communications		
Protocol	LonTalk communication protocol	LonTalk communication protocol
Communication Interface	TP/FT-10, 78 kbps	TP/FT-10, 78 kbps
Software		
Pre loaded Application/ASC	Yes	Yes
Physical		
Dimensions	127 W x 126 H x 50 D mm (5.0 W x 4.9 H x 1.9 D in.)	159 W x 197 H x 63 D mm (6.25 W x 7.75 H x 2.50 D in.)
Weight	0.4 kg (0.88 lb.)	1.04 kg (2.3 lb.)
Power		
Power	24 VAC ±20%, 50/60 Hz	24 VAC ±10%, 50/60 Hz
Consumption	6 VA with Xenta OP, Digital Outputs max 6 x 9 =114 VA , Total max 120 VA	9 VA, Digital Outputs each 12 VA , Total max 36 VA
Environmental		
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 0-95% RH (non-condensing)	0 °C to 50 °C (32 °F to 122 °F) 0-90% RH (non-condensing)
External Features		
Enclosure rating	UL94 5VB, IP 30 (<2.5 mm protection)	NEMA-1, UL94 5VB, IP 10 (<50 mm protection)
HOA Switches (DO/AO)	No	No
Digital Status LEDs	No	No
Intelligent Sensors	STR150	STR150
Service Port	Xenta OP	Xenta OP
Terminals		
I/O Terminals	Fixed terminal	Two-piece terminal
I/O Expansion	No	No
External Enclosure/Mounting		
Enclosure class	N/A	N/A
Mounting	DIN-rail or wall mount	VAV/FPB box mount
Certifications		
LonMark	LonMark certified: VAV 8010	LonMark certified: VAV 8010
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class B (Emission)
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)
C-UL US	Yes	No
CE-EU	Yes	Yes
WEEE - Directive of the European Union	Yes	Yes
RoHS Directive	Yes	Yes
RCM	Yes	Yes

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Xenta Series Controllers, continued



Xenta 122-FC/24, 122-FC/230 Flexible Zone Controllers

	122-FC/24,
	122-FC/230
Part Number	007307110, 007307120
Communications	
Protocol	LonTalk communication protocol
Communication Interface	TP/FT-10, 78 kbps
Software	
Pre loaded Application/ASC	Hybrid
Physical	
Dimensions	112 W x 110 H x 50 D mm (4.37 W x 4.29 H x 2.00 D in.)
Weight	0.3 kg (0.66 lb.) / 0.6 kg (1.3 lb)
Power	
Power	24 VAC ±20%, 50/60 Hz (230 V AC ±10%, 50-60 Hz)
Consumption	Controller and OP 4 VA, including digital outputs: FC/24: 84 VA, FC/230: 20 VA
Environmental	
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 0-90% RH (non-condensing)
External Features	
Enclosure rating	UL94 5VB, IP 20 (<12.5 mm protection)
HOA Switches (DO/AO)	No
Digital Status LEDs	No
Intelligent Sensors	STR150
Service Port	Xenta OP
Terminals	
I/O Terminals	Fixed terminal
I/O Expansion	No
External Enclosure/Mounting	
Enclosure class	N/A
Mounting	DIN-rail or wall mount
Certifications	
LonMark	LonMark certified: 8501 Fan Coil
FCC	47 CFR Part 15, Subpart B, Class B
UL	UL-916 (Energy Management Equipment)
C-UL US	Yes
CE - EU	Yes
WEEE - Directive of the European Union	Yes
RoHS Directive	Yes
RCM	Yes

Xenta Series I/O Modules



Xenta 411/412 10 Channel Digital Input Modules



Xenta 421A/422A 4 Channel Universal Input/5 Channel Digital Output Modules

	411, 412	421A, 422A
Part Number	007302011, 007302031	007302450, 007302460
Communications		
Protocol	LonTalk communication protocol	LonTalk communication protocol
Communication Interface	TP/FT-10, 78 kbps	TP/FT-10, 78 kbps
Physical		
Dimensions	90 W x 110 H x 75 D mm (3.55 W x 4.33 H x 3.1 D in.)	90 W x 110 H x 75 D mm (3.55 W x 4.33 H x 3.1 D in.)
Weight (including baseplate)	0.595 kg (1.41 lb.)	0.295 kg (0.65 lb.)
Power		
Power	24 VAC ±20%, 50/60 Hz	24 VAC ±20%, 50/60 Hz
Consumption	2 VA	4 W, 8 VA transformer
Environmental		
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 0-90% RH (non-condensing)	0 °C to 50 °C (32 °F to 122 °F) 0-90% RH (non-condensing)
External Features		
Enclosure rating	UL94 V-0, IP 20 (<12.5 mm protection)	UL94 V-0, IP 20 (<12.5 mm protection)
HOA Switches (DO/AO)	Available on 412 model	Available on 422A model
Digital Status LEDs	Available on 412 model	Available on 422A model
Terminals		
I/O Terminals	Terminal base	Terminal base
External Enclosure/Mounting		
Enclosure class	Enclosed class (no separate enclosure required)	Open class (separate enclosure required)
Mounting	DIN-rail or wall mount	DIN-rail or wall mount
Certifications		
LonMark	No	LonMark [®] certified: Digital Input 20543, Analog Input 0520
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class B (Emission)
UL	UL-916 (Energy Management Equipment), UL 3111-1 (Electrical Measuring and Test Equipment)	UL-916 (Energy Management Equipment)
C-UL US	Yes	Yes
CE - EU	Yes	Yes
WEEE - Directive of the European Union	Yes	Yes
RoHS Directive	Yes	Yes
RCM	Yes	Yes

Xenta Series I/O Modules, continued



Xenta 451A / 452A 8 Channel Universal Input/2 Channel Analog Output Modules



Xenta 471 8 Channel Universal Input Module



Xenta 491/492 8 Channel Analog Output Modules

	451A, 452A	471	491, 492
Part Number	007302850, 007302860	007302910	007303010, 007303030
Communications			
Protocol	LonTalk communication protocol	LonTalk communication protocol	LonTalk communication protocol
Communication Interface	TP/FT-10, 78 kbps	TP/FT-10, 78 kbps	TP/FT-10, 78 kbps
Physical			
Dimensions	90 W x 110 H x 75 D mm (3.55 W x 4.33 H x 3.1 D in.)	90 W x 110 H x 75 D mm (3.55 W x 4.33 H x 3.1 D in.)	90 W x 110 H x 75 D mm (3.55 W x 4.33 H x 3.1 D in.)
Weight (including baseplate)	0.295 kg (0.65 lb.)	0.495 kg (1.09 lb.)	0.495 kg (1.09 lb.)
Power			
Power	24 VAC ±20%, 50/60 Hz	24 VAC ±20%, 50/60 Hz	24 VAC ±20%, 50/60 Hz
Consumption	3 W, 6 VA transformer	4 W, 8 VA transformer	3 W, 6 VA transformer
Environmental			
Operating Range	0 °C to 50 °C (32 °F to 122 °F) 0-90% RH (non-condensing)	0 °C to 50 °C (32 °F to 122 °F) 0-90% RH (non-condensing)	0 °C to 50 °C (32 °F to 122 °F) 0-90% RH (non-condensing)
External Features			
Enclosure rating	UL94 V-0, IP 20 (<12.5 mm protection)	UL94 V-0, IP 20 (<12.5 mm protection)	UL94 V-0, IP 20 (<12.5 mm protection)
HOA Switches (DO/AO)	Available on 452A model	No	Available on 492 model
Digital Status LEDs	Available on 452A model	No	Available on 492 model
Terminals			
I/O Terminals	Terminal base	Terminal base	Terminal base
External Enclosure/Mounting			
Enclosure class	Enclosed class (no separate enclosure required)	Enclosed class (no separate enclosure required)	Enclosed class (no separate enclosure required)
Mounting	DIN-rail or wall mount	DIN-rail or wall mount	DIN-rail or wall mount
Certifications			
LonMark	LonMark certified: Analog Input 0520, Analog Output 0521	No	No
FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class A (Emission)
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment), UL 3111-1 (Electrical Measuring and Test Equipment)	UL-916 (Energy Management Equipment), UL 3111-1 (Electrical Measuring and Test Equipment)
C-UL US	Yes	Yes	Yes
CE-EU	Yes	Yes	Yes
WEEE - Directive of the European Union	Yes	Yes	Yes
RoHS Directive	Yes	Yes	Yes
RCM	Yes	Yes	Yes

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Xenta Series Controllers – Inputs and Outputs

	102-ES	102-AX	122-FC/24, 122-FC/230
Part Number	007305370	007305401	007307110, 007307120
Universal Inputs		4	4
Digital Contact		•	•
Digital Counter - Low Speed			
Digital Counter - Medium Speed			
Digital Counter - High Speed			
Digital Supervised			
Analog Voltage - 0-1 V			
Analog Voltage - 0-5 V		•	
Analog Voltage - 0-10 V			•
Analog Voltage - 2-10 V			
Analog Current - 0-20 mA			
Analog Current - 4-20 mA			
Analog Resistance			
Analog Thermistor - 10 k		•	
Analog Thermistor - 1.8 k			•
Analog Thermistor - 1 k			
Digital Inputs	2		3
Digital Contact	•		•
Counter - Low Speed			
Counter - Medium Speed			
Counter - High Speed			
Analog Inputs	3	5	•
Voltage - 0-5 V		4 channel	
Voltage - 0-10 V	1 channel		
Velocity Pressure	1 channel internal	1 channel internal	
Resistor, 10 k			•
Analog Thermistor - 10 k			
Analog Thermistor - 1.8 k	•		
Analog Thermistor - 1 k			
Digital Outputs	6	3	8
Form A, SPST			4
Form C, SPDT			
Triac	•	•	4
Analog Outputs	1		3
Voltage - 0-10 V	•		•
Current - 0-20 mA			
Damper Outputs		1	
Form K, Triac		internal	
Voltage			
Intelligent Sensors	1	1	1
STR (Xenta)	•	•	•

Xenta Series I/O Modules – Inputs and Outputs

	411, 412	421A, 422A	451A, 452A	471	491, 492
Part Number	007302011, 007302031	007302450, 007302460	007302850, 007302860	007302910	007303010, 007303030
Universal Inputs		4	8	8	
Digital Contact		•	•		
Digital Counter - Low Speed			•		
Digital Counter - Medium Speed		•			
Digital Counter - High Speed					
Digital Supervised					
Analog Voltage - 0-1 V		•	•	•	
Analog Voltage - 0-5 V		•	•	•	
Analog Voltage - 0-10 V		•	•	•	
Analog Voltage - 2-10 V		•	•	•	
Analog Current - 0-20 mA		•	•	•	
Analog Current - 4-20 mA		•	•	•	
Analog Resistance		•	•		
Analog Thermistor - 10 k		•	•		
Analog Thermistor - 1.8 k		•	•		
Analog Thermistor - 1 k					
Digital Inputs	10				
Digital Contact	•				
Counter - Low Speed					
Counter - Medium Speed	•				
Counter - High Speed					
Digital Outputs		5			
Form A, SPST		•			
Form C, SPDT					
Triac					
Analog Outputs			2		8
Voltage - 0-10 V			•		•
Current - 0-20 mA					

Note: 421A, 422A, 451A, and 452A can also be used as distributed I/Os under an automation server.

MNL Series

The MNL series of controllers are designed in accordance with LonMark[®] guidelines. When programmed or loaded with a preengineered application, these controllers provide control for packaged rooftops, heat pumps, fan coils, unit ventilators, and similar applications.

MNL Series Controllers



MNL-50 Fan Coil, Heat Pump, Roof Top, Satellite Zone Controllers



MNL-100 Fan Coil, Heat Pump, Roof Top, Satellite Zone Controllers



MNL-110 Fan Coil Zone Controller

Consumption 12 VA (84 W with DO loads (824 VA each) 15 VA 20.5 VA Environmental -40 °C to 60 °C (40 °F to 140 (F) 5-98% RH (non-condensing) -40 °C to 55 °C (-40 °F to 120 (F) 5-98% RH (non-condensing) -40 °C to 55 °C (-40 °F to 120 (F) 5-98% RH (non-condensing) -40 °C to 55 °C (-40 °F to 120 (F) 5-98% RH (non-condensing) -40 °C to 55 °C (-40 °F to 120 (F) 5-98% RH (non-condensing) -70 °C to 60 °C (-40 °F to 120 (F) 5-98% RH (non-condensing) Nauron FT5000 Neuron FT5000 Memory Fiash = 64 byte or 512k bit (Fissh = 64 byte or 512k bit, EEProm 6 k bit or 8 k byte Nauron FT5000 Neuron FT5000 Battery N/A NA NA NA NA Read time clock No No No No No Extornal Features E E No No No No HOA Switches (DO/AO) No No No No No No Display Via S-Link Sensor Via S-Link Sensor Via S-Link Sensor LonWorks Network Jack via S-Link Sensor Sensor Link (S-Link) Sensor Link (S-Link) <th></th> <th>MNL-50</th> <th>MNL-100</th> <th colspan="2">MNL-110</th>		MNL-50	MNL-100	MNL-110	
Protocol LonTalk @ communication protocol LonTalk @ communication protocol Communication Interface TP/FT-10, 78 kbps TP/FT-10, 78 kbps TP/FT-10, 78 kbps Software Pre Loaded Application/ASC Yes Yes Yes Dimensions 127 W x112 H x41 D mm 109 W x111 H x51 D mm 156.49 W x107 H x50 D mi Power 24 VAC +25% -15%, 50/60 Hz Power 24 VAC +25% -15%, 50/60 Hz 24 VAC +25% -15%, 50/60 Hz<	Part Number	MNL-5RR3, MNL-5RS3,	10RH3, MNL-10RR3,	MNL-11RF3	
Protocol protocol protocol protocol Communication Interface TPFT-10, 78 kbps TPFT-10, 78 kbps TPFT-10, 78 kbps Software Yes Yes Yes Yes Protocald Application/ASC Yes Yes Yes Yes Protocal 27 W x 112 H x 41 D mm (5.0 W x4.5 H x 1.825 D m) (5.7 W x4.5 H x 1.825 D m) (5.7 W x4.5 H x 1.825 D m) 194 W x114 H x51 D mm (5.7 W x4.5 H x 1.825 D m) 194 W x114 H x51 D mm (5.7 W x4.5 H x 1.825 D m) 194 W x142 H x 2.0 D m) 194 W x142 H x 2.0 D m) Weight (including baseplate) N/A N/A N/A N/A Power 24 VAC +25% -15%, 50/60 Hz	Communications				
Communication Interface TP/F1-10, 78 kbps TP/F1-10, 78 kbps TP/F1-10, 78 kbps Software File loaded Application/ASC Yes Yes Pre loaded Application/ASC Yes Yes Yes Programmability WorkPlace Tech programmable WorkPlace Tech programmable WorkPlace Tech programmable Dimensions 127 W x12 H x41 D mm 169 W x11 H x51 D mm 154.9 W x107 H x50 D mi Power 24 VAC +25% -15%, 50/60 Hz 20 VAC +25% +15%, 10/60 Hz	Protocol				
Pre loaded Application/ASC Yes Yes Pregrammability WorkPlace Tech programmabile WorkPlace Tech programmabile WorkPlace Tech programmabile Physical 127 W X 112 H x 41 D mm 154.9 W X 107 H x 50 D nn 154.9 W X 107 H x 50 D nn Meight (including baseplate) N/A N/A N/A N/A Power 24 VAC +25% -15%, 50/60 Hz 24 VAC +25%, -15%, 50/60 Hz 24 VAC +25%, -15%, 50/60 Hz 24 VAC +25%, -15%, 50/60 Hz Power 24 VAC +25%, -15%, 50/60 Hz	Communication Interface			1	
Programmability WorkPlace Tech programmable WorkPlace Tech programmable WorkPlace Tech programmable Physical 127 W x 112 H x 41 D mm (4.37 W x 4.29 H x 2.00 D m.) 154.9 W x 107 H x 50 D mm (4.37 W x 4.29 H x 2.00 D m.) Weight (including baseplate) N/A N/A N/A Power 24 VAC +25% -15%, 50% D Hz 24 VAC +25% -15%, 50% D Hz 24 VAC +25% -15%, 50% D Hz Consumption 12 VA (64 VA, with DO loads (224 VA each) 15 VA 20.5 VA Environmental -40 °C to 60 °C (-40 °F to 140 (-15 +50% RH (non-condensity) 'F) 5-56% RH (non-condensity) 'F) 5-56% RH (non-condensity) 'F) 5-56% RH (non-condensity) 'F) 0-56% RH (non-	Software				
Physical Internations 127 Wx 112 H x41 D mm 100 Wx 111 H x51 D mm 154 9 Wx 107 H x50 D mm Veight (including baseplate) N/A N/A N/A N/A Power 24 VAC +25% -15%, 50/60 Hz Power 24 VAC +25% -15%, 50/60 Hz Power 24 VAC +25% -16%, 50/60 Hz 24 VAC +25% -15%, 50/60 Hz 20 5 VA Operating Range +10 × 10 × 60 × 00 Aur or 16 × 00 × 00 Aur or 152 × b0 EEProm 6 × b1 × 6 × 51 × b1, EEProm 6 × b1 × 6 × byte Flash = 64 byte or 512 × b0 EEProm 6 × b1 × 6 × byte EEProm 6 × b1 × 6 × byte Flash = 64 byte or 512 × b0 EEProm 6 × b1 × 6 × byte Flash = 64 byte or 512 × b0 EEProm 6 × b1 × 6 × byte Flash = 64 byte or 512 × b0 EEProm 6 × b1 × 6 × byte Flash = 64 byte or 512 × b0 Flash = 64 byte or 512 × b0 <td< td=""><td>Pre loaded Application/ASC</td><td>Yes</td><td>Yes</td><td>Yes</td></td<>	Pre loaded Application/ASC	Yes	Yes	Yes	
Dimensions 127 Wx 112 H × 41 D mm (50 W × 4.5 H × 1625 D in.) 100 Wx 111 H × 61 D mm (4.37 W × 4.29 H × 2.00 D in.) 164 9 W × 12 H × 2.0 D in.) Weight (including baseptate) N/A N/A N/A N/A Power Power Power Power Power Consumption 12 VA (64 VA with D0 loads (2/4 VA each) 24 VAC +25% -15%, 50/60 Hz 24 VAC +25% -15%, 50/60 Hz 24 VAC +25% -15%, 50/60 Hz Consumption 12 VA (64 VA with D0 loads (2/4 VA each) 01 °C to 60 °C (-40 °F to 140 -40 °C to 55 °C (-40 °F to 12 K) Battery N/A N/A N/A N/A N/A Battery N/A N/A N/A N/A N/A Battery N/A N/A N/A N/A N/A Enclosure fabures<		WorkPlace Tech programmable	WorkPlace Tech programmable	WorkPlace Tech programmable	
Dimensions (S.0.W x4.5 ht x1 625 D in.) (4.37 W x4.2 ht x2.00 D in.) (6.1 W x4.2 ht x2.00 D in.) Weight (including baseplate) N/A N/A N/A Power 24 VAC +25% -15%, 50/60 Hz 40 °C to 50 °C (-40 °F to 140 -40 °C to 51 °C (-40 °F to 150 °C (-40	Physical	127 W x 112 H x 11 D mm	100 W v 111 H v 51 D mm	154.0 W/ x 107 H x 50 D mm	
Power 24 VAC +25% -15%, 50/60 Hz 20.5 VA Consumption (22 VA each) 15 VA 20.5 VA 20.5 VA Environmental -40 °C to 60 °C (-40 °F to 140 -40 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °C to 60 °C (-40 °F to 140 -70 °F to 140 Flash = 64 byte or 512 k bit Flash = 64 byte or	Dimensions				
Power 24 VAC +25% +15%, 50/60 Hz 40 °C to 55 °C (+40 °F to 116 °F Hz) Hz 40 °C to 55 °C (+40 °F to 12 × bit EFProm 6 × bit or 8 k byte 15 VA N28 VS N28 VS NA NA <td>Weight (including baseplate)</td> <td>N/A</td> <td>N/A</td> <td>N/A</td>	Weight (including baseplate)	N/A	N/A	N/A	
Consumption 12 VA (84 VA with DO loads 22 VA each) 15 VA 20.5 VA Environmental -40 °C to 60 °C (-40 °F to 140 °F) 5-95% RH (non-condensing) -40 °C to 55 °C (-40 °F to 17 °F) 0-95% RH (non-condensing) -40 °C to 55 °C (-40 °F to 17 °F) 0-95% RH (non-condensing) CPU Neuron FT5000 Neuron FT5000 Neuron FT5000 Neuron FT5000 Memory Flash = 64 byte or 512 k bit, EEProm 6 k bit or 6 k byte Flash = 94 byte or 512 k bit, EEProm 6 k bit or 6 k byte Flash = 94 byte or 512 k bit, EEProm 6 k bit or 6 k byte Statery N/A N/A N/A N/A Real time clock No No No No D10 Switches (D0/A0) No No No No D11 Status LEDs No No No No D12 Status LEDs No No No No D12 Status LEDs No No No No					
Consumption @24 vA each) 15 VA 20.5 VA Environmental -40 °C to 60 °C (-40 °F to 140 *F) 0-95% RH (non-condensing) -40 °C to 55 °C (-40 °F to 140 *F) 0-95% RH (non-condensing) -40 °C to 55 °C (-40 °F to 150 *F) 0-95% RH (non-condensing) CPU Internals - - -40 °C to 60 °C (-40 °F to 140 *F) 0-95% RH (non-condensing) -40 °C to 55 °C (-40 °F to 150 *F) 0-95% RH (non-condensing) Memory Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Elash = 64 by	Power		24 VAC +25% -15%, 50/60 Hz	24 VAC +25% -15%, 50/60 Hz	
Operating Range -40 °C to 60 °C (-40 °F to 140 °F to 5-95% RH (non-condensing) -40 °C to 55 °C (-40 °F to 140 °F to 3-95% RH (non-condensing) CPU Neuron FT5000 Neuron FT5000 Neuron FT5000 Neuron FT5000 Memory Elash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte or 512 k bit, Selink Sensor U L94 V-0 Ital Status LEDs No No No Display Via S-Link Sensor Via S-Link Sensor LonWorks Network Jack via S-Link Sensor LonWorks Network Jack via S-Link Sensor Vio Eraminals	Consumption		15 VA	20.5 VA	
Operating kange "F) 5-95% RH (non-condensing) "F) 5-95% RH (no	Environmental				
CPU Neuron FT5000 Neuron FT5000 Neuron FT5000 GPU Neuron FT5000 Neuron FT5000 Neuron FT5000 Memory Flash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Flash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Flash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte Battery N/A N/A N/A N/A Battery N/A N/A N/A Real time clock No No No Enclosure rating NEMA-1, UL94 5 V (Plenum rated) UL94 V-0 UL94 V-0 HOA Switches (DO/AO) No No No Display Via S-Link Sensor Via S-Link Sensor Via S-Link Sensor Via S-Link Sensor Intelligent Sensors Sensor Link (S-Link) Sensor Link (S-Link) Sensor Link (S-Link) Service Port LonWorks Network Jack via S-Link Sensor Selvice S-Link Sensor Via S-Link Sensor I/O Erymaision No No No Selvice S-Link Sensor I/O Erymaision No No No Selvice S-Link Sensor I/O Erymaision No	Operating Range			-40 °C to 55 °C (-40 °F to 131 °F) 0-95% RH (non-condensing)	
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Battery N/A N/A N/A N/A Real time clock No No No No External Features Enclosure rating NEMA-1, UL94 5 V (Plenum rated) NEMA-1, UL94 5 V (Plenum rated) UL94 V-0 HOA Switches (DO/AO) No No No No Display Via S-Link Sensor Via S-Link Sensor Via S-Link Sensor Service Port LonWorks Network Jack via S-Link Sensor LonWorks Network Jack via S-Link Sensor LonWorks Network Jack via S-Link Sensor 1v0 Terminals Fixed terminal Terminal base Fixed terminal I/O Terminals Fixed terminal Terminal base Fixed terminal I/O Expansion No No No AD A/D Conversion - Inputs Yes Yes Yes Yes Enclosure class N/A N/A N/A N/A Mounting Wall mount DIN-rail or wall mount DIN-rail or wall mount Certifications LonMark certified: Fan Coil 8020, Heat Pump, Roof Top, Satellite LonMark certified: Fan Coil 8020, Heat Pump, Roof Top, Satellite	Memory			Flash = 64 byte or 512 k bit,	
External FeaturesEnclosure ratingNEMA-1, UL94 5 V (Plenum rated)NEMA-1, UL94 5 V (Plenum rated)UL94 V-0HOA Switches (DO/AO)NoNoNoNoDiglal Status LEDsNoNoNoNoDisplayVia S-Link SensorVia S-Link SensorVia S-Link SensorVia S-Link SensorIntelligent SensorsSensor Link (S-Link)Sensor Link (S-Link)Sensor Link (S-Link)Service PortLonWorks Network Jack via S-Link SensorLonWorks Network Jack via S-Link SensorLonWorks Network Jack via S-Link SensorI/O TerminalsFixed terminalTerminal baseFixed terminalI/O ExpansionNoNoNoA/D Conversion - InputsYesYesEnclosure classN/AN/AN/AConduit knockoutsNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountConflark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteConMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteConflark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteUL-916 (Energy Management Equipment)Lu-916 (Energy Management Equipment)Lu-813 (Temperature Indic and Regulating Equipment) Recognized component an UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment) RecognizedULYesYesYesYesYesVEEE - Directive of the<	Battery		,		
Enclosure ratingNEMA-1, UL94 5 V (Plenum rated)NEMA-1, UL94 5 V (Plenum rated)UL94 V-0HOA Switches (DO/AO)NoNoNoNoDigital Status LEDsNoNoNoNoDisplayVia S-Link SensorVia S-Link SensorVia S-Link SensorVia S-Link SensorIntelligent SensorsSensor Link (S-Link)Sensor Link (G-Link)Sensor Link (S-Link)Service PortLonWorks Network Jack via S-Link SensorLonWorks Network Jack via S-Link SensorLonWorks Network Jack via S-Link Sensor1/0 TerminalsFixed terminalTerminal baseFixed terminal1/0 CspansionNoNoNoA/D Conversion - InputsYesYesYes2 Conduit knockoutsNoNoNoA/D Conversion - OutputsYesYesYes2 Enclosure classN/AN/AN/AConduit knockoutsNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountCertificationsLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteUL-873 (Temperature Indic and Regulating Equipment)Industry Canada (IC)YesYesYesYesVEEE - Directive of the European UnionNoNoNoNoNoNoNoNoNoNoRecognized Component an UL-916 (Energy Manageme	Real time clock	No	No	No	
Enclosure ratingrated)rated)rated)ULS4 V0HOA Switches (DO/AO)NoNoNoNoDigital Status LEDsNoNoNoDisplayVia S-Link SensorVia S-Link SensorVia S-Link SensorIntelligent SensorsSensor Link (S-Link)Sensor Link (S-Link)Sensor Link (S-Link)Service PortLonWorks Network Jack via S-Link SensorLonWorks Network Jack via S-Link SensorLonWorks Network Jack Via S-Link SensorTerminalsFixed terminalTerminal baseFixed terminalI/O ExpansionNoNoNoA/D Conversion - InputsYesYesYesYesYesYesA/D Conversion - OutputsYesYesEnclosure classN/AN/AN/AConduit knockoutsNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountCertificationsLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteUL-873 (Temperature Indic and Regulating Equipment)Industry Canada (IC)YesYesYesYesVEEE - Directive of the European UnionNoNoNoNoNoNoNoNoNoRecognized component at UL-916 (Energy Management Equipment)ViesYesYes	External Features	-			
Digital Status LEDSNoNoNoDisplayVia S-Link SensorVia S-Link SensorVia S-Link SensorIntelligent SensorsSensor Link (S-Link)Sensor Link (S-Link)Sensor Link (S-Link)Service PortLonWorks Network Jack via S-Link SensorLonWorks Network Jack via S-Link SensorLonWorks Network Jack via S-Link SensorTerminalsFixed terminalTerminal baseFixed terminalI/O TorminalsFixed terminalTerminal baseFixed terminalI/O ExpansionNoNoNoAoA/D Conversion - OutputsYesYesYesYesYesYesYesYesEnclosure classN/AN/AN/AConduit knockoutsNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountCertificationsLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, Satellite47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)ULUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-873 (Temperature Indic and Regulating Equipment)ULYesYesYesYesVesYesYesYesWEEE - Directive of the European UnionNoNoNoNoNoNoNoNoRodel S DirectiveNoNoNoNo	Enclosure rating			UL94 V-0	
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Intelligent SensorsSensor Link (S-Link)Sensor Link (S-Link)Sensor Link (S-Link)Service PortLonWorks Network Jack via S-Link SensorLonWorks Network JackLonWorks Network JackTerminals-Link SensorLonWorks Network JackLonWorks Network Jack//O TerminalsFixed terminalTerminal baseFixed terminal//O ExpansionNoNoNoA/D Conversion - InputsYesYesYesA/D Conversion - OutputsYesYesYesEnclosure/MountingYesYesYesEnclosure/MountingWall mountDIN-rail or wall mountDIN-rail or wall mountConduit knockoutsNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountCertificationsLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)VEEE - Directive of the European UnionNoNoNoNoRod S DirectiveNoNoNoNo	Digital Status LEDs				
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I/O ExpansionNoNoNoA/D Conversion - InputsYesYesYesYesA/D Conversion - OutputsYesYesYesYesExternal Enclosure/MountingYesYesYesYesEnclosure classN/AN/AN/AN/AConduit knockoutsNoNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountDIN-rail or wall mountCertificationsLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteUL-9715, Class B (Emission)LonMark certified: Fan Coil 8020LonMark certified: Fan Coil 8020LonMark certified: Fan Coil 8020UL-9716, Class B (Emission)UL-9716, Class B (Emission)UL-9716, Class B (Emission)UL-973 (Temperature Indic and Regulating Equipment)ULUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-973 (Temperature Indic and Regulating Equipment)C-UL USYesYesYesYesYesWEEE - Directive of the European UnionNoNoNo<		Fixed terminal	Transiant base	Fined terminal	
A/D Conversion - InputsYesYesYesA/D Conversion - OutputsYesYesYesExternal Enclosure/MountingYesYesEnclosure classN/AN/AN/AConduit knockoutsNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountCertificationsLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020FCC47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)Industry Canada (IC)YesYesYesUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)WESYesVEEE - Directive of the European UnionNoNoNoNoNoRodB DirectiveNoNoNoNoNoNo					
A/D Conversion - OutputsYesYesYesYesExternal Enclosure/MountingEnclosure classN/AN/AN/AConduit knockoutsNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountCertificationsLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 					
External Enclosure/MountingEnclosure classN/AN/AN/AConduit knockoutsNoNoNoMountingWall mountDIN-rail or wall mountDIN-rail or wall mountCertificationsLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020FCC47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)10-10-10-10-10-10-10-10-10-10-10-10-10-1					
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CertificationsLonMarkLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020LonMark certified: Fan Coil 8020FCC47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)Use Provide Pump, Roof Top, 8020Industry Canada (IC)YesYesYesYesULUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Recognized component an UL-916 (Energy Management Equipment)UL-916 (Energy Management Recognized component an UL-916 (Energy Management Equipment)VesYesC-UL USYesYesYesYesYesWEEE - Directive of the European UnionNoNoNoNoRob DirectiveNoNoNoNo	Conduit knockouts	No	No	No	
LonMarkLonMark certified: Fan Coil 8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Coil 8020LonMark certified: Fan Coil 8020FCC47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)Industry Canada (IC)YesYesYesYesULUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-873 (Temperature Indic and Regulating Equipment) Recognized component an UL-916 (Energy Management Equipment)UL-873 (Temperature Indic and Regulating Equipment) Recognized component an UL-916 (Energy Management Equipment)CUL USYesYesYesYesWEEE - Directive of the European UnionNoNoNoNoNoNoNoNo	Mounting	Wall mount	DIN-rail or wall mount	DIN-rail or wall mount	
LonMark8020, Heat Pump, Roof Top, Satellite8020, Heat Pump, Roof Top, SatelliteLonMark certified: Fan Cor 8020FCC47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)47 CFR § 15, Class B (Emission)Industry Canada (IC)YesYesYesYesULUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management Recognized component an UL-916 (Energy Management Equipment)YesYesCE - EUYesYesYesYesYesWEEE - Directive of the European UnionNoNoNoNoRodd S DirectiveNoNoNoNo	Certifications				
PCC(Emission)(Emission)(Emission)Industry Canada (IC)YesYesYesULUL-916 (Energy Management Equipment)UL-916 (Energy Management Equipment)UL-916 (Energy Management ecognized component an UL-916 (Energy Management)UL-916 (Energy Management ecognized component an UL-916 (Energy Management)C-UL USYesYesYesCE - EUYesYesYesWEEE - Directive of the European UnionNoNoNoRoHS DirectiveNoNoNo	LonMark	8020, Heat Pump, Roof Top,	8020, Heat Pump, Roof Top,	LonMark certified: Fan Coil 8020	
Industry Canada (IC) Yes Yes UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment) UL-916 (Energy Management Recognized component an UL-916 (Energy Management Equipment) C-UL US Yes Yes Yes CE - EU Yes Yes Yes WEEE - Directive of the European Union No No No	FCC				
UL UL-916 (Energy Management Equipment) UL-916 (Energy Management Equipment) and Regulating Equipment Recognized component an UL-916 (Energy Management Equipment) C-UL US Yes Yes CE - EU Yes Yes WEEE - Directive of the European Union No No No No No	Industry Canada (IC)				
CE - EU Yes Yes Yes WEEE - Directive of the European Union No No No RoHS Directive No No No	UL			UL-873 (Temperature Indicating and Regulating Equipment) Recognized component and UL-916 (Energy Management Equipment) Recognized	
WEEE - Directive of the European Union No No No RoHS Directive No No No	C-UL US	Yes	Yes	Yes	
European Union No No No RoHS Directive No No No	CE - EU	Yes	Yes	Yes	
		No	No	No	
	RoHS Directive	No	No	No	
RCM Yes Yes Yes	RCM	Yes	Yes	Yes	

MNL Series Controllers, continued



MNL-130 Fan Coil Zone Controller



MNL-150 Fan Coil, Heat Pump, Roof Top, Satellite Zone Controllers



MNL-200 Fan Coil, Heat Pump, Roof Top, Satellite Zone Controllers

	MNL-130	MNL-150	MNL-200 MNL-20RF3, MNL-20RH3, MNL-20RR3, MNL- 20RS3, MNL-20RS4	
Part Number	MNL-13RF3	MNL-15RF3, MNL-15RH3, MNL-15RR3, MNL-15RS3, MNL-15RS4		
Communications				
Protocol		LonTalk communication protocol		
Communication Interface	TP/FT-10, 78 kbps	TP/FT-10, 78 kbps	TP/FT-10, 78 kbps	
Software Pre loaded Application/ASC	Yes	Yes	Yes	
Programmability		WorkPlace Tech programmable		
Physical	·····		P. • 9. •	
Dimensions	154.9 W x 107 H x 50 D mm	109 W x 111 H x 51 D mm	109 W x 111 H x 51 D mm	
Weight (including baseplate)	(6.1 W x 4.2 H x 2.0 D in.) N/A	(4.37 W x 4.29 H x 2.00 D in.)	(4.37 W x 4.29 H x 2.00 D in.)	
Power	N/A	N/A	N/A	
Power	24 VAC +25% -15%, 50/60 Hz	24 VAC +25% -15%, 50/60 Hz	24 VAC +25% -15%, 50/60 Hz	
Consumption	21.5 VA	15 VA	15 VA	
Environmental				
Operating Range	-40 °C to 55 °C (-40 °F to 131 °F) 0-95% RH (non-condensing)	-40 °C to 60 °C (-40 °F to 140 °F) 5-95% RH (non-condensing)	-40 °C to 60 °C (-40 °F to 140 °F) 5-95% RH (non-condensing)	
CPU Internals	Neuron FT5000	Neurop ETE000	Neuron FT5000	
CPU	Flash = 64 byte or 512 k bit,	Neuron FT5000 Flash = 64 byte or 512 k bit,	Flash = 64 byte or 512 k bit,	
Memory	EEProm 6 k bit or 8 k byte	EEProm 6 k bit or 8 k byte	EEProm 6 k bit or 8 k byte	
Battery	N/A	N/A	N/A	
Real time clock	No	No	No	
External Features				
Enclosure rating	UL94 V-0	NEMA-1, UL94 5 V (Plenum rated)	NEMA-1, UL94 5 V (Plenum rated)	
HOA Switches (DO/AO)	No	No	No	
Digital Status LEDs	No	No	No	
Display	Via S-Link Sensor	Via S-Link Sensor	Via S-Link Sensor	
Intelligent Sensors	Sensor Link (S-Link) LonWorks Network Jack via	Sensor Link (S-Link)	Sensor Link (S-Link)	
Service Port	S-Link Sensor	LonWorks Network Jack	LonWorks Network Jack	
Terminals				
I/O Terminals	Fixed terminal	Terminal base	Terminal base	
I/O Expansion	No	No	No	
A/D Conversion - Inputs	Yes	Yes	Yes	
A/D Conversion - Outputs	Yes	Yes	Yes	
External Enclosure/Mounting Enclosure class	N/A	N/A	N/A	
Conduit knockouts	No	No	No	
Mounting	DIN-rail or wall mount	DIN-rail or wall mount	DIN-rail or wall mount	
Certifications	Shiridanor Manihodan			
LonMark	LonMark certified: Fan Coil 8020	LonMark certified: Fan Coil 8020, Heat Pump, Roof Top, Satellite	LonMark certified: Fan Coil 8020, Heat Pump, Roof Top, Satellite	
FCC	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	
Industry Canada (IC)	Yes	Yes	Yes	
UL	UL-873 (Temperature Indicating and Regulating Equipment) Recognized component and UL-916 (Energy Management Equipment) Recognized	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	
C-UL US	Yes	Yes	Yes	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the European Union	No	No	No	
RoHS Directive	No	No	No	
RCM	Yes	Yes	Yes	

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MNL Series Controllers, continued



MNL-800 Local Controller



MNL-V1RVx VAV Zone Controller



MNL-V2RVx VAV Zone Controller

	MNL-800	MNL-V1RVx	MNL-V2RVx	
Part Number	Number MNL-800-102		MNL-V2RV3-2	
Communications				
Protocol	LonTalk communication protocol	LonTalk communication protocol	LonTalk communication protocol	
Communication Interface	TP/FT-10, 78 kbps	TP/FT-10, 78 kbps	TP/FT-10, 78 kbps	
Software				
Pre loaded Application/ASC	Yes	Yes	Yes	
Programmability	WorkPlace Tech programmable	WorkPlace Tech programmable	WorkPlace Tech programmable	
Physical				
Dimensions	216 W x 262 H x 101 D mm (8.5 W x 10.875 H x 4.25 D in.)	159 W x 197 H x 63 D mm (6.25 W x 7.75 H x 2.50 D in.)	159 W x 197 H x 63 D mm (6.25 W x 7.75 H x 2.50 D in.)	
Weight (including baseplate)	N/A	N/A	N/A	
Power				
Power	24 VAC +25% -15%, 50/60 Hz	24 VAC +25% -15%, 50/60 Hz	24 VAC +25% -15%, 50/60 Hz	
Consumption	20 VA	12 VA	12 VA (84 VA with DO loads @24 VA each)	
Environmental				
Operating Range	-40 °C to 60 °C (-40 °F to 140 °F) 5-95% RH (non-condensing)	0 °C to 55 °C (32 °F to 131 °F) 5-95% RH (non-condensing)	0 °C to 55 °C (32 °F to 131 °F) 5-95% RH (non-condensing)	
CPU Internals				
CPU	SAF-C161, 10 MHz Clock speed, 16 bit word size	Neuron FT5000	Neuron FT5000	
Memory	EPROM = 512; RAM = 128; EEPROM = 32	Flash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte	Flash = 64 byte or 512 k bit, EEProm 6 k bit or 8 k byte	
Battery	Rechargeable, 3 days for clock and RAM	N/A	N/A	
Real time clock	±30 minutes/year at 25 °C (77 °F)	No	No	
External Features				
Enclosure rating	N/A	NEMA-1, UL94 5 V (Plenum rated)	NEMA-1, UL94 5 V (Plenum rated)	
HOA Switches (DO/AO)	No	No	No	
Digital Status LEDs	No	No	No	
Display	Via S-Link Sensor	Via S-Link Sensor	Via S-Link Sensor	
Intelligent Sensors	Sensor Link (S-Link)	Sensor Link (S-Link)	Sensor Link (S-Link)	
Service Port	LonWorks Network Jack	LonWorks Network Jack via S-Link Sensor	LonWorks Network Jack via S-Link Sensor	
Terminals	-	-		
I/O Terminals	Terminal base	Fixed terminal	Fixed terminal	
I/O Expansion	No	No	No	
A/D Conversion - Inputs	Yes	Yes	Yes	
A/D Conversion - Outputs	Yes	Yes	Yes	
External Enclosure/Mounting Enclosure class	Open class (separate	N/A	N/A	
Conduit knockouts	enclosure required) Yes - On enclosure	No	No	
Mounting	Wall mount	Wall mount	No Wall mount	
Certifications	Wair mount	Wairmount	Wairmount	
LonMark	LonMark certified	LonMark certified: VAV 8010	LonMark certified: VAV 8010	
FCC	47 CFR § 15, Class A (Emission)	47 CFR § 15, Class B (Emission)	47 CFR § 15, Class B (Emission)	
Industry Canada (IC)	Yes	Yes	Yes	
UL	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	UL-916 (Energy Management Equipment)	
C-UL US	Yes	Yes	Yes	
CE - EU	Yes	Yes	Yes	
WEEE - Directive of the European Union	No	No	No	
RoHS Directive	No	No	No	
RCM	Yes	Yes	Yes	

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MNL Series Controllers, continued



MNL-V3RV3 VAV Zone Controller

Part Number	MNL-V3RV3		
Communications			
Protocol	LonTalk communication protocol		
Communication Interface	TP/FT-10, 78 kbps		
Software			
Pre loaded Application/ASC	Yes		
Programmability	WorkPlace Tech programmable		
Physical			
Dimensions	114 W x 127 H x 41 D mm (4.5 W x 5.0 H x 1.625 D in.)		
Weight (including baseplate)	N/A		
Power			
Power	24 VAC +25% -15%, 50/60 Hz		
Consumption	12VA (102 VA with DO loads @24 VA each and triac load @18 VA each)		
Environmental			
Operating Range	0 °C to 55 °C (32 °F to 131 °F)		
CPU Internals	5-95% RH (non-condensing)		
CPU Internais	Neuron FT5000		
	Flash = 64 byte or 512 k bit,		
Memory	EEProm 6 k bit or 8 k byte		
Battery	N/A		
Real time clock	No		
External Features			
Enclosure rating	NEMA-1, UL94 5 V (Plenum rated)		
HOA Switches (DO/AO)	No		
Digital Status LEDs	No		
Display	Via S-Link Sensor		
Intelligent Sensors	Sensor Link (S-Link)		
Service Port	LonWorks Network Jack via S-Link Sensor		
Terminals			
I/O Terminals	Fixed terminal		
I/O Expansion	No		
A/D Conversion - Inputs	Yes		
A/D Conversion - Outputs	Yes		
External Enclosure/Mounting			
Enclosure class	N/A		
Conduit knockouts	No		
Mounting	Wall mount		
Certifications			
LonMark	LonMark certified: VAV 8010		
FCC	47 CFR § 15, Class B (Emission)		
Industry Canada (IC)	Yes		
UL	UL-916 (Energy Management Equipment)		
C-UL US	Yes		
CE - EU	Yes		
WEEE - Directive of the European Union	No		
	N		
RoHS Directive	No		

MNL-V3RV3

MNL Series Controllers – Inputs and Outputs

	MNL-50	MNL-100	MNL-110	MNL-130	MNL-150
Part Number	MNL-5RF3, MNL-5RH3, MNL-5RR3, MNL-5RS3, MNL-5RS4	MNL-10RF3, MNL- 10RH3, MNL-10RR3, MNL-10RS3, MNL- 10RS4	MNL-11RF3	MNL-13RF3	MNL-15RF3, MNL- 15RH3, MNL-15RR3, MNL-15RS3, MNL- 15RS4
Universal Inputs	1	2	3	3	3
Digital Contact	•	•	•	•	•
Digital Counter - Low Speed					
Digital Counter - Medium Speed					
Digital Counter - High Speed					
Digital Supervised					
Analog Voltage - 0-1 V					
Analog Voltage - 0-5 V	•	•	•	•	•
Analog Voltage - 0-10 V					
Analog Voltage - 2-10 V					
Analog Current - 0-20 mA	•	•	•	•	•
Analog Current - 4-20 mA					
Analog Resistance	•	•	•	•	•
Analog Thermistor - 10 k					
Analog Thermistor - 1.8 k					
Analog Thermistor - 1 k	•	•	•	•	•
Digital Inputs	1	1			
Digital Contact	•	•			
Counter - Low Speed					
Counter - Medium Speed					
Counter - High Speed					
Analog Inputs					
Voltage - 0-5 V					
Voltage - 0-10 V					
Velocity Pressure					
Analog Thermistor - 10 k					
Analog Thermistor - 1.8 k					
Analog Thermistor - 1 k					
Digital Outputs	3	4	5	7	2
Form A, SPST	•	•	1 channel	3 channel	•
Form C, SPDT					
Triac			4 channel	4 channel	
Analog Outputs					2
Voltage - 0-10 V					
Current - 0-20 mA					•
Damper Outputs					
Form K, Triac					
Voltage					
Intelligent Sensors	1	1	1	1	1
S-Link (MN-Sx for MNL)	•	•	•	•	•

MNL Series Controllers – Inputs and Outputs, continued

	MNL-200	MNL-800	MNL-V1RVx	MNL-V2RVx	MNL-V3RV3
Part Number	MNL-20RF3, MNL- 20RH3, MNL-20RR3, MNL-20RS3, MNL- 20RS4	MNL-800-102	MNL-V1RV3-2	MNL-V2RV3-2	MNL-V3RV3
Universal Inputs	3	8	1	1	1
Digital Contact	•	•	•	•	•
Digital Counter - Low Speed					
Digital Counter - Medium Speed					
Digital Counter - High Speed					
Digital Supervised					
Analog Voltage - 0-1 V					
Analog Voltage - 0-5 V	•	•	•	•	•
Analog Voltage - 0-10 V					
Analog Voltage - 2-10 V					
Analog Current - 0-20 mA	•	•	•	•	•
Analog Current - 4-20 mA					
Analog Resistance	•	•	•	٠	•
analog Thermistor - 10 k					
Analog Thermistor - 1.8 k					
Analog Thermistor - 1 k	•	•	•	•	•
Digital Inputs	2	5	1	1	1
Digital Contact	•	•	•	•	•
Counter - Low Speed					
Counter - Medium Speed		4 channel			
Counter - High Speed		1 channel			
analog Inputs			1	1	1
/oltage - 0-5 V					
′oltage - 0-10 V					
/elocity Pressure			internal	internal	internal
nalog Thermistor - 10 k					
nalog Thermistor - 1.8 k					
nalog Thermistor - 1 k					
Digital Outputs	6	8		3	5
Form A, SPST	·			•	3 channel
Form C, SPDT		•			
riac					2 channel
nalog Outputs	2	4		1	1
/oltage - 0-10 V					
Current - 0-20 mA	•	•		•	•
Damper Outputs			1	1	
Form K, Triac			internal	internal	
/oltage					
ntelligent Sensors	1	1	1	1	1
-Link (MN-Sx for MNL)	•	•	•	•	•

Additional Resources

Modernize your BMS with EcoStruxure Building

Building automation technology is changing rapidly. New building management systems help deliver occupant satisfaction and productivity, are more secure, and provide better performance!

Future-ready your customers' buildings. Minimize the risk, downtime and cost of modernizing a BMS, and take advantage of new features and benefits, with EcoStruxure Building transition tools and services.

Customer benefits:

- Update and make your buildings IoT-ready while preserving existing site investments
- Leverage the benefits of Schneider Electric's preeminent building management system, including: a new user experience, new technology and new feature sets

System integrator benefits:

- Protect valued customer relationships with best-in-class solutions and conversion tools to ease customer site transitions
- Save time and labor costs by reusing components (controllers, sensors, wiring) and system design and configuration

Mutual benefits:

- Choose from multiple modernization path options to meet specific needs, schedules and budgets
- Enable access to connected offers; facilitate predictive and preventative cloud-enabled connected services

Tools are available to support transition from any other building management systems:

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TAC I/A Series™ – transitioniaseries
TAC I/NET™ – transitioninet
TAC Vista™ – transitionvista
Andover Continuum [™] – transitioncontinuum
NETWORK 8000 [™] − transitionnw8000

Use the keywords to find all assets on The Exchnage.



Find comprehensive transition assets and tools on The Exchange: <u>https://ecobuilding.schneider-electric.com/transition-to-ecostruxure#tab/documents</u>

EcoStruxure Building Advisor

Empowering you to achieve greater lifetime building efficiencies.

Facilities managers are faced with difficult challenges:

Tighter budgets, aging infrastructure, and higher energy costs demand a different approach to a building's operation and maintenance. Our comprehensive service portfolio combines people, technology and collaboration to help you lower operating costs, improve occupant comfort, and increase asset value.

You can benefit from:

- Field service engineers and data scientists who provide support and troubleshoot problems onsite and remotely
- Real-time system alarm monitoring and continuous building performance monitoring to anticipate issues
- Automated fault detection and diagnostics to speed resolution. We'll identify
 opportunities to save costs, improve comfort and well-being with cost justification
- Customized, detailed reports with deep insights on your building systems and expert advice with solutions

		Plus	Prime	Ultra	Managed Services
Mo	Alarm Monitoring	¥	¥	¥	
Monitoring	Condition Monitoring		 Image: A second s	¥	 Image: A second s
ing	Cloud Backup	¥	 Image: A second s	¥	
Mair	Preventive Checks		 Image: A second s	 Image: A second s	
Maintenance	Remote Issue Resolution	¥	 Image: A second s	 Image: A second s	
	Condition-Based Checks			 Image: A second s	
Re	Alarms and Site Work Report	¥	 Image: A second s	 Image: A second s	
Reports & Consultation	Site Health Report		 V 	 Image: A second s	 Image: A second s
	Site Health Report with ROI Justification			¥	 Image: A second s



Please find information on EcoStruxure Building Advisor on The Exchange: <u>https://ecobuilding.schneider-electric.com/ecostruxure-building-advisor</u>

People Onsite Maintenance

Support

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Technology

 Alarm and Condition Monitoring
 Cloud Backup

Collaboration

Reports & Consultation



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Connected products are an integral part of EcoStruxure Building, Schneider Electric's open innovative platform of buildings. Inclusive of valves, actuators, sensors and cabling management solutions, connected products help ensure optimal performance and comfort.

Valves, actuators and sensors interpret critical data points, sending real-time responses to changes in the physical environment while connectors and patch panels solve cabling network management challenges.

If connected products are not running at optimal efficiency, neither is the higher level BMS.

How strong is your foundation?



Learn more about our BIM-enabled connected products here: <u>https://www.schneider-electric.com/en/work/support/building-information-modelling/</u>



Please find all sales, marketing and technical documentation on Connected Devices on The Exchange: <u>https://ecobuilding.schneider-electric.com/field-devices#tab/documents</u>



Engineering efficiency tools; Increase simplicity. Save time.

Find more Efficiency Tools information on The Exchange: https://ecobuilding.schneider-electric.com/tools

Automated Engineering Tool (AET)

Drive efficiency and standardization with anytime access to a large selection of standard HVAC applications and components on this cloud-based repository. The AET enables users to create templates based on preexisting engineered solutions and reuse those templates on other projects or for similar applications on the same project.

Search keyword: AET

Project Configuration Tool (PCT)

Produce proven solutions that are high quality and easy to maintain with the PCT, an offline engineering platform used for project configuration, server configuration and deployment. This virtual environment allows engineers to spend less time at the customer site, and design, program, model and analyze solutions in their own offices without the need for physical hardware.

Search keyword: PCT

EcoStruxure eCommission Building Mobile App

Conveniently load controller applications, program and configure systems, conduct I/O checkout and air balancing, and more, for SpaceLogic Controllers all from a laptop computer or any IOS or Android device. These commissioning activities can be done early in the process even without a network infrastructure in place.

Search keyword: mp-x app

Expert Tool

This PC-based software application helps visualize the configuration of EcoStruxure Building Enterprise Server and SpaceLogic Controllers. The tool enables design commissioning or support engineers to see the relationship between the objects on the folder structure and generate documentation to support the commissioning or support process.

Search keyword: Expert Tool

Selection Tools

Find a range of product selection tools on The Exchange, including SE8000 and SE7000 Series Room Controllers, EcoStruxure Building Expert, Heat and Flow Meters, and HVAC Sensors, and Power Meters.

Graphic Development Support

Outsource graphics development for building management system and user interface needs to our expert team of highly skilled graphic developers, ACAD engineers and Revit/ MEP specialists. They possess expertise in BMS graphics development, Building Information Modeling (BIM), 3D graphics and image rendering.

Search keyword: Graphic Development Support

https://ecobuilding.schneider-electric.com/tools



Please find information on Efficiency Tools on The Exchange: https://ecobuilding.schneider-electric.com/



EcoStruxure[™] Security Expert

Your First Line of Defense in Building Security

Protect your building occupants and assets with EcoStruxure Security Expert, an integrated role-based physical access control and intrusion detection solution that unifies your building's security infrastructure and management systems into an easy to manage, single platform that enables faster, more efficient, and potentially life-saving decision making.

Available for small, mid and large enterprise environments, this solution provides extensive data handling capabilities that can store millions of credentials in off-line memory; while functioning independently and maintaining a unique database. Information is encrypted throughout the architecture, and complies with global agency listings. EcoStruxure Security Expert will also easily extend to multiple sites and future business expansions.



One unified view

Connect anywhere from any device



Please find all sales, marketing and technical documentation for EcoStruxure Security Expert on The Exchange:

https://ecobuilding.schneider-electric.com/ecostruxure-security-expert#tab/documents

Application-specific Room Controllers

SE7000 and SE8000 Series.

Cost effective alternative to direct digital controls.

Schneider Electric room controllers bridge the gap between the cost of stand-alone thermostats and the performance of DDC systems. They simplify installation and commissioning to control rooftop units, fan coil units, terminal units and heat pump applications in a wide variety of facilities. Our series of intelligent room controllers provide comfort and energy savings using their native application-specific control sequences, PID algorithms, occupancy detection and schedule management.

SE8000 Series

With rich, customizable features, the SE8000 Series enables significant energy savings with accurate temperature control in any space. The SE8000 room controllers can be easily integrated into most BMSs as well as to communicate wirelessly for ease of installation, flexibility and scalability.

SE7000 Series

The SE7000 digital controllers offer easy-to-install, thermostat-like functionality that sense occupancy and adjust set-point or fan speed control. Easily integrate into most BMSs. The wireless versions of the SE7000 provide a simple

yet powerful solution which targets retrofit installations where running new communication wiring is prohibitive.



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Quick Links

Digital Tools & Resources

The Exchange – EcoBuilding Extranet https://ecobuilding.schneider-electric.com

MyExchange Mobile App https://schneiderelectric.showpad.biz

iTunes (iOS) download

https://itunes.apple.com/us/app/ myexchange-schneider-electric/ id911005711?mt=8_

Google Play (Android) download

https://play.google.com/store/ apps/details?id=com.showpad. myexchange&hl=en

mySchneider App

Tailored services, 24/7 self-service, and expert help

http://www.schneider-electric.com/b2b/ en/support/myschneider-app/?c=Internal_ News_LDC&pid=Email

Sales, Marketing & Thought Leadership

Sales Enablement Kit

https://ecobuilding.schneider-electric. com/ecostruxure-building-operation/ sales-support-library/sales-enablementkits#Language!English!10910/tab/ documents

Sales Support Library

https://ecobuilding.schneider-electric. com/ecostruxure-building-operation/salessupport-library#Language!English!10910/ tab/documents

Customer Success Stories

https://ecobuilding.schneiderelectric.com/ecostruxure-buildingoperation/sales-support-library/casestudy#Language!English!10910/tab/ documents

Schneider Electric Videos

https://www.youtube.com/user/ SchneiderCorporate

Schneider Electric Blog

http://blog.schneider-electric.com/ building-management/

White Papers

http://www.schneider-electric.com/ww/en/ download/1555889-WhitePaperLanding

Community & Product Support

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Building Management Community

https://exchangecommunity.schneiderelectric.com/t5/Building-Management-Systems/ct-p/building-management

Knowledgebase (Lessons Learned) http://buildingskb.schneider-electric.com

EcoStruxure Solution WebHelp

https://ecostruxure-building-help.se.com

Customer Care Center

www.schneider-electric.com

Go to "Support" section tab and select your country of origin

Or install the **"mySchneider" mobile application** onto your Apple or Android device

mySchneider app

Product Support

https://ecobuilding.schneider-electric. com/support#tab/documents



Please find more EcoStruxure information on The Exchange: <u>https://ecobuilding.schneider-electric.com</u>

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