

SpaceLogic AS-P Servers

EcoStruxure™ Building



Introduction

At the core of an EcoStruxure BMS is an automation server, such as the SpaceLogic™ AS-P server. The AS-P server performs key functionality, such as control logic, trend logging, and alarm supervision, and supports communication and connectivity to the I/O and field buses. The distributed intelligence of the EcoStruxure BMS helps ensure fault tolerance against detected faults and provides a fully featured user interface through WorkStation and WebStation.

Features

The AS-P server is a powerful device that can act as a standalone server and also control Central IO modules and monitor and manage field bus devices. In a small installation, the

embedded AS-P server acts as a standalone server, mounted with its Central IO modules in a small footprint. In medium and large installations, functionality is distributed over multiple automation servers that communicate over TCP/IP.

The AS-P server has the following features:

- Communications hub
- Variety of connectivity options
- Zigbee wireless network support
- Authentication and permissions through powerful systems
- WorkStation/WebStation interface
- Native BTL-listed BACnet support

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- BACnet/SC node, hub, or router
- Native LonWorks support
- Native OPC UA Client support
- Native Modbus support
- Additional building protocol support
- Web Services support based open standards
- EcoStruxure Web Services support
- MQTT IoT protocol support
- External log storage option
- AVEVA PI System support
- Meter management
- Normalization and signatures
- Compliance for regulated industries
- Reporting
- Scalable custom configurations
- I/O expansion option
- Text and graphics-based programming tools
- eMMC memory for data and backup
- IT friendly networking based on the TCP/IP suite of communication protocols
- TLS support
- Patented two-piece design
- Auto-addressing
- Simple DIN-rail installation
- Secure boot

Communications hub

Capable of coordinating traffic from above and below its location, the AS-P server can deliver data directly to you or to other servers throughout the site. The AS-P server can run multiple control programs, manage local I/O, alarms, and users, handle scheduling and logging, and communicate using a variety of protocols. Because of this, most parts of the system function autonomously and continue to run as a whole even if communication is interrupted or individual EcoStruxure BMS servers or devices go offline.

Variety of connectivity options

An AS-P server has numerous ports that enable it to communicate with a wide range of protocols, devices, and servers.

An AS-P server has the following ports:

- Two 10/100 Ethernet ports
- Two RS-485 ports

- One LonWorks TP/FT port (not available on AS-P server models with “NL” in the product name)
- One built-in I/O bus port
- One USB device port
- One USB host port

The first Ethernet port is dedicated to the site network. The second Ethernet port is fully configurable. The second port can be configured to extend the site network so that various devices and clients can be connected. Another option is to configure the second port as a separate network, which means that the port can host a private network. This port configuration with dual networks requires hardware version 0.62 or higher. If the second port is not used, it can be disabled.

The USB device port allows you to upgrade and interact with the AS-P server using Device Administrator.

Using a USB Ethernet adapter, you can connect a laptop PC to the USB host port and run Device Administrator, WorkStation, and WebStation to upgrade, configure, and access the AS-P server. The USB host port can also be used to provide power and communications for Wireless Adapter - Advanced.

Zigbee wireless network support

Through Wireless Adapter - Advanced connected to the host USB port, Zigbee™ wireless connectivity can be enabled for the automation server. The automation server can extend its point count through the Zigbee wireless network and bring flexibility in your applications. The automation server equipped with the adapter is together a Zigbee Certified Product that is compliant with Zigbee 3.0. For more information on the adapter and supported wireless devices, see the Wireless Adapter - Advanced Specification Sheet.

Authentication and permissions

An EcoStruxure BMS provides a powerful permission system that is easy to manage, flexible, and adapts to all kinds of system sizes. The permission system provides a high standard of authentication. Authentication is done against the built-in user account management system or a SAML 2.0 identity provider. If used with Enterprise Server for Windows, authentication can be done against Windows Active Directory. The built-in account management system allows an administrator to establish password policies that meet stringent cybersecurity guidelines. In addition, multi-factor authentication (MFA) according to RFC 6238 is supported and enforceable. Applications such as Google Authenticator and Microsoft Authenticator can be used as part of the user authentication. When Windows Active Directory or SAML 2.0 authentication is used, the administration costs are lower because users do not have to be managed in multiple directories.

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WorkStation/WebStation interface

Through any client, the user experience is similar regardless of which EcoStruxure BMS server the user is logged on to. The user can log directly on to an AS-P server to engineer, commission, supervise, and monitor the AS-P server as well as its attached Central IO modules and field bus devices. See the WorkStation and WebStation specification sheets for additional information.

Open building protocol support

One of the cornerstones of the EcoStruxure BMS is support for open standards. The AS-P server can natively communicate with some of the most popular standards for buildings: BACnet (including BACnet/SC), OPC UA Client, LonWorks, and Modbus.

Native BTL-listed BACnet support

An AS-P server communicates directly to BACnet/IP and BACnet MS/TP networks. The AS-P servers are BTL-listed as BACnet Building Controllers (B-BC), the most advanced BACnet Device Profile. This capability provides access to an extensive range of BACnet devices from Schneider Electric and other vendors. See the BTL Product Catalog for up-to-date details on BTL listed firmware revisions on BACnet International's home page. An AS-P server can also serve as a BACnet Broadcast Management Device (BBMD) to facilitate BACnet systems that span multiple IP subnets.

BACnet/SC (Secure Connect) support

The Enterprise Server and automation servers support BACnet/SC applications as a BACnet/SC node, hub, and router. This allows the Enterprise Server and automation servers to be in BACnet/SC networks and support applications that connect BACnet/IP or MS/TP networks with BACnet/SC networks. A major benefit of BACnet/SC is that it allows more secure transport of BACnet traffic and information between BACnet/SC devices over private and public networks without the need for BBMDs, VLANs, and VPNs, because the BACnet/SC protocol uses WebSocket technology and TLS 1.3 encryption. In addition, BACnet/SC uses certificate management to help ensure only those devices authorized to be on a BACnet/SC network can operate on that network.

Native OPC UA Client support

OPC UA Client functionality is natively supported in Enterprise Server and field servers, enabling powerful and high-capacity integration of devices or systems that have OPC UA Server capability. OPC Unified Architecture (OPC UA) is a standard originating from industrial automation and process control that provides methods intended to provide improved security, performance, and engineering efficiency. With OPC UA Client support, the EcoStruxure BMS software can monitor and control a wide variety of devices or systems, from Schneider Electric as well as from other companies.

Native LonWorks support

The AS-P server has a built-in FTT-10 port to communicate to the TP/FT-10 LonWorks network. Integrated LonWorks functionality

enables access to LonWorks devices from Schneider Electric and other vendors. LonWorks networks can be commissioned, bound, and configured from the AS-P server using the built-in LonWorks Network Management Tool. No third-party tools are needed. A protocol analyzer with powerful debugging and network quality monitoring features can be achieved using third-party software, without additional hardware needed. To increase ease of use, LNS device plug-ins are supported. This allows for easier engineering and maintenance of LonWorks devices from Schneider Electric and other vendors. There are some limitations on how LNS device plug-ins can be used.

AS-P server models with “NL” in the product name, for example AS-P-NL and AS-P-NLS, do not support LonWorks.

Native Modbus support

The Enterprise Server and automation servers natively integrate Modbus RS-485 client and server configurations, as well as Modbus TCP client and server. This allows full access to third-party products and the range of Schneider Electric products that communicate on the Modbus protocol, such as power meters, UPS, circuit breakers, and lighting controllers.

Modbus device types are pre-configured Modbus applications for quick and easy Modbus device integration in EcoStruxure BMS solutions. For information on the Modbus devices supported using Modbus device types, see the document EcoStruxure Building - Modbus Device Integration - Supported Device Brochure.

Additional building protocol support

The AS-P server also supports integration and communication with Schneider Electric supplied BMS systems and devices that use the following standards for buildings: I/NET, NETWORK 8000 (only ASD devices supported), and Andover Continuum Infinet.

Web Services support

The AS-P server supports the use of Web Services based on open standards, such as SOAP and REST, to consume data into the EcoStruxure BMS. Use incoming third-party data (temperature forecast, energy cost) over the Web to determine site modes, scheduling, and programming.

EcoStruxure Web Services support

EcoStruxure Web Services, Schneider Electric's Web Services standard, is natively supported in the EcoStruxure BMS servers. EcoStruxure Web Services offers extra features between compliant systems whether within Schneider Electric or other authorized systems. These features include system directory browsing, read/write of current values, alarm receipt and acknowledgement, and historical trend log data. EcoStruxure Web Services requires user name and password to log on to the system.

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MQTT IoT protocol support

The Enterprise Server and field servers support MQTT as an option for publishing data to, and receiving updates from, other systems. MQTT is a messaging transport protocol that with its small footprint, light bandwidth utilization, and simplicity, is ideal for M2M and IoT communication. The MQTT capability supports communication with any MQTT broker, for example, Amazon, Microsoft, Google or IBM.

External log storage option

EcoStruxure BMS servers can be configured to automatically store all historical data, trend log data, event log and audit trail data, in an external database. If data needs to be available for longer periods of time, an external log storage can be incorporated into the EcoStruxure BMS without the need for extensive engineering work. The supported databases are TimescaleDB, which is built on PostgreSQL, and Microsoft SQL Server. The data in the external log storage is available natively to the viewers built into the EcoStruxure BMS clients and to the built-in reporting functionality.

You can use the powerful Log Processor functionality for custom processing of trend data for viewing in charts, dashboards and for inclusion in reports. The Log Processor enables advanced calculations on one or multiple trend logs and point values.

Examples of advanced calculations:

- Energy usage normalization
- Virtual submeters and summaries
- Calculation of Mean Kinetic Temperature
- Unit conversions
- Average, maximum, and minimum over custom periods

The output of the Log Processor can be saved in the database, including the External Log Storage or calculated automatically on demand.

AVEVA PI System support

Selected trend logs and the event log can be sent to AVEVA PI System directly without the need for intermediate storage or specialized PI System connectors. The EcoStruxure BMS server can also be the front-end client to AVEVA PI System and obtain data from the PI System that can be included in reports, graphics, and dashboards.

Meter management

With the meter management functionality, EcoStruxure Building Operation offers improved methods to ensure data is accurate and meter changes are automatically detected. In addition, purpose-built functions enable easier handling of the following concepts:

- Aggregations

- Virtual metering
- Apportioned metering
- Unit conversions

Meter hierarchies enable powerful visualization of sub-meter structures or categorizations. A web-based editor with intelligent help functions enables efficient construction of meter hierarchies.

Normalization and signatures

The normalization functions help with benchmarking, and the signature function enables automation and/or alerting when resource usage is too high or low. This enables early detection of faulty equipment and misused building functions, resulting in energy savings and higher occupant satisfaction.

The system includes easy-to-use tools for regression analysis and powerful methods for time-period classification, that is, differentiation of workdays versus holidays.

Compliance for regulated industries

Using the built-in security features within the EcoStruxure BMS software, you can comply with 21 CFR Part 11 and other Life Sciences regulations, restricting access to authorized and qualified individuals and with full audit trail. In addition, the built-in access and security settings can be enhanced by applying further restrictions and limit access by time-of-day or geographic location.

The change control features extend the basic activity logging provided by the EcoStruxure BMS software by enhancing the functionality of the standard log, enabling efficient and fully configurable change control with the following features:

- Single or dual electronic signature application
- Change control that can be restricted only to specific objects in the system
- Change control that can easily be applied to all objects
- Every associated action is logged with the parameter that was changed
- Before and after parameter values including meta data

For each signature event, the change control signatures contain:

- The unique identifier of the person executing the signature
- The full name of the user who performed the action
- The geographical date and time stamp
- The meaning of the signature, such as approval, review, responsibility, and authorship

Reporting

The EcoStruxure BMS servers provide built-in functionality for basic reporting that can deliver reports in any text format and XLSX, without any dependencies to other external software.

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Reports for XLSX can be enriched by using advanced functionality such as formulas, conditional formatting, charts and sparklines.

Reports can be generated on schedule, on an alarm event or other custom conditions, and you can get the output delivered via email or written to file.

Scalable custom configurations

The AS-P server and its family of Central IO modules were designed to meet the unique needs of each installation. Depending on the configuration, each AS-P server can control up to 464 I/O points. Because power and communications are delivered along a common bus, multiple modules can be plugged together without tools in a simple one-step process using the built-in connectors.

I/O expansion

For applications that require remote I/O resources, the SpaceLogic IP-IO modules provide a versatile mix of I/O points for any application. For more information, see the SpaceLogic IP-IO Specification Sheet.

Text and graphics-based programming tools

Unique to the industry, the EcoStruxure BMS servers have both Script and Function Block programming options. This flexibility helps assure that a suitable programming method can be selected for the application.

eMMC memory for data and backup

The automation server has a 4 GB eMMC memory, which is used, for example, for the application, historical data, and backup storage. Users can also manually back up or restore the automation server to a storage location on a PC or network. Through the Enterprise Server, users have the ability to perform scheduled backups of associated automation servers to network storage for even greater levels of protection.

IT friendly

The EcoStruxure BMS servers communicate using the networking standards. This makes installations easy, management simple, and transactions more secure.

Supported protocols

- IP addressing
- TCP communications
- DHCP for easy network configuration
- DNS for simple lookup of addresses
- HTTP/HTTPS for Internet access through firewalls, which enables remote monitoring and control
- NTP (Network Time Protocol) for time synchronization throughout the system

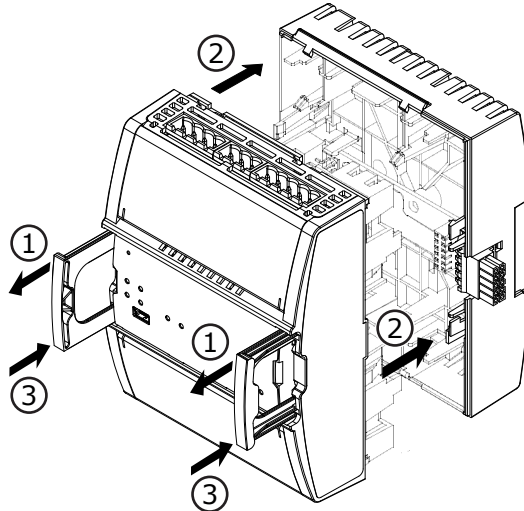
- SMTP or SMTPS with support for SSL/TLS based authentication, enables sending email messages triggered by schedule or alarm
- SNMP enables network supervision and reception of application alarms in designated network management tools
- WebSocket Secure (WSS) and TLS 1.3 encryption (BACnet/SC applications)

TLS support

Communication between clients and the EcoStruxure BMS servers, and between EcoStruxure BMS servers, can be encrypted using Transport Layer Security (TLS). The servers are delivered with a default self-signed certificate. Commercial Certification Authority (CA) server certificates are supported to lower the risk of malicious information technology attacks. Use of encrypted communication can be enforced for both WorkStation and WebStation access.

Patented two-piece design

Each module can be separated from its terminal base to allow the site to be wired prior to the installation of the electronics. The patented locking mechanism serves as handles for removing the module from its base. All critical components have a protective cover that permits convection cooling to occur.



Two-piece design

Auto-addressing

The auto-addressing feature helps eliminating the need for setting DIP switches or pressing commission buttons. Each module automatically knows its order in the chain and assigns itself accordingly – significantly reducing engineering and maintenance time.

Simple DIN-rail installation

Fasteners easily snap into a locked position for panel installation. The fastener has a quick-release feature for easy DIN-rail removal.

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Secure boot

Secure boot is a security standard to help ensure that a device boots using only software that is trusted by Schneider Electric.

Secure boot is supported by AS-P server models with “S” in the product name, for example AS-P-S and AS-P-NLS.

Software Licensing Model

EcoStruxure BMS software version 7.0 offers a simplified and centralized licensing model which allows for one-time, single-step activation of a system license deployed at the top level server of the system, thus removing the need for license engineering on each server in the system. This provides considerable time savings during the initial commissioning as well as during any future upgrade of the system.

System capabilities are available in a three-tier model: Essential, Advanced, and Advanced Plus. Select the tier that matches your business needs, and everything will then be bundled into the centralized system license and inherited across all servers in your system architecture, including Enterprise Central, Enterprise Server, and field servers.

The centralized licensing model combined with the three-tier capability model provides a uniquely easy-to-manage system throughout the lifecycle. Among other benefits, this gives the ability to remotely manage the capability tier as business needs evolve and to facilitate expansion as the system grows with added servers and connected devices.

Configuration of software licenses is done through EcoStruxure Power & Building Software Companion, accessible by EcoXpert™ partners and Schneider Electric representatives. It provides the ability to select architecture and tier options as well as manage license evolutions throughout the lifecycle of the system.

For more information on the three-tier system capabilities, see the Schneider Electric website, www.se.com.

Hardware Part Numbers

For information on the hardware part numbers for the AS-P products and accessories, see the following tables.

Part Numbers for AS-P Hardware

Hardware Product	Part Number
SpaceLogic AS-P	SXWASPXXX10001
SpaceLogic AS-P-S	SXWASPSBX10001
SpaceLogic AS-P-SBA ^a	SXWASPSBX10A01
SpaceLogic AS-P-NL	SXWASPXXX10002
SpaceLogic AS-P-NLS	SXWASPSBX10002
SpaceLogic AS-P-SMK ^b	SXWASPXXX1S001
SpaceLogic AS-P-NLS-SMK ^b	SXWASPSBX1S002
TB-ASP-W1, Terminal Base for AS-P servers (Required for each AS-P server)	SXWTBASW110002
TB-ASP-W1-BAA, Terminal Base for AS-P servers ^c (Required for each AS-P server)	SXWTBASW110A02

- a) AS-P-SBA is Buy American Act (BAA) compliant. AS-P-SBA is also included in a BAA compliant bundle that includes the AS-P-SBA server, TB-ASP-W1-BAA terminal base, PS-24V-BAA power supply, and TB-PS-W1-BAA terminal base. AS-P-SBA can be ordered separately using the part number SXWASPSBX10A01. The bundle can be ordered using the part number SXWASPSBX10A01. AS-P-SBA does not differ from AS-P-S in terms of hardware and functionality.
- b) Approved for use in UL 864 smoke control systems. The Smoke Control (SMK) models are shipped with a validated UL 864 software version, which can differ from the latest released software. For information on the approved software revisions for the device when used in UL 864 smoke control systems, see the Smoke Control System Approved Software Revisions - EcoStruxure Building Management document, 01-16001-XX-en.
- c) TB-ASP-W1-BAA is included in a Buy American Act (BAA) compliant bundle that includes the AS-P-SBA server, TB-ASP-W1-BAA terminal base, PS-24V-BAA power supply, and TB-PS-W1-BAA terminal base. TB-ASP-W1-BAA can only be ordered using the part number for the AS-P-SBA bundle (SXWASPSBX10A01). TB-ASP-W1-BAA does not differ from TB-ASP-W1 in terms of hardware and functionality.

Part Numbers for AS-P Hardware Accessories

Hardware Product	Part Number
AS-P connector kit	SXWASPCON10001
SpaceLogic Wireless Adapter - Advanced	SXWZBAUSB10001

SpaceLogic AS-P

Specifications

SpaceLogic AS-P

Electrical

DC input supply power 10 W

DC input supply voltage 24 VDC

Environment

Ambient temperature, operating 0 to 50 °C (32 to 122 °F)

Ambient temperature, storage -20 to +70 °C (-4 to +158 °F)

Maximum humidity 95 % RH non-condensing

Material

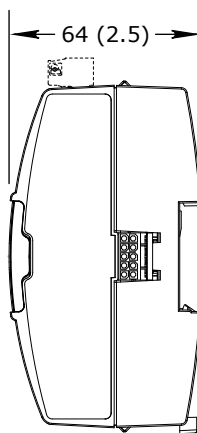
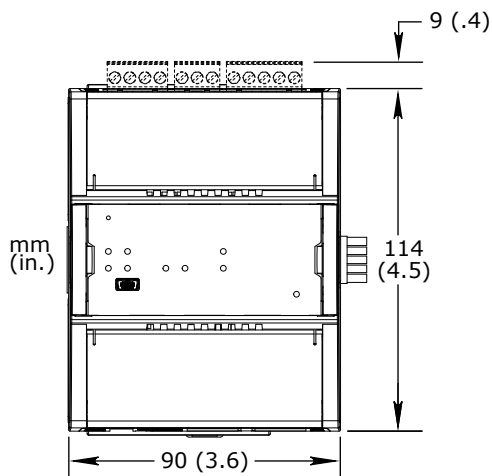
Plastic flame rating UL94-5VB

Enclosure PC/ABS

Ingress protection rating IP 20

Mechanical

Dimensions including terminal base 90 W x 114 H x 64 D mm (3.6 W x 4.5 H x 2.5 D in.)



Weight including terminal base 0.321 kg (0.71 lb)

Weight excluding terminal base 0.245 kg (0.54 lb)

Agency compliances

Emission RCM; BS/EN 61000-6-3; BS/EN IEC 63044-5-2; FCC Part 15, Sub-part B, Class B

Immunity BS/EN 61000-6-2; BS/EN IEC 63044-5-3

Safety standards BS/EN 60730-1; BS/EN 60730-2-11; BS/EN IEC 63044-3; UL 916 C-UL US Listed

Product BS/EN IEC 63044-1

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Smoke control product safety^a

UL 864

a) Applies to the Smoke Control (SMK) models. For specifications and information on the restrictions that apply to the SMK models when used in UL 864 smoke control systems, see the EcoStruxure Building Management - Smoke Control System Design Guide, 04-16014-XX-en.

Real-time clock

Accuracy in runtime mode

NTP server

Accuracy in backup mode, at 25 °C (77 °F)

+/-52 seconds per month

Backup time, at 25 °C (77 °F)

10 days

Communication ports

Ethernet

Dual 10/100BASE-TX (RJ45), IEEE 802.3 compliant

USB

1 USB 2.0 device port (mini-B)
1 USB 2.0 host port (type-A), 5 VDC, 2.5 W

RS-485

Dual 2-wire ports, bias 5.0 VDC

LonWorks^a

TP/FT-10

a) AS-P server models with "NL" in the product name, for example AS-P-NL and AS-P-NLS, do not support LonWorks.

Communications

BACnet

BACnet/IP, port configurable, default 47808
BACnet/SC, port configurable, no default port

BACnet profile

BACnet Building Controller (B-BC), BACnet Secure Connect Hub (B-SCHUB), AMEV AS-B

BACnet certification

BTL Certification (BTL Listing^a, WSPCert)

a) See the BTL Product Catalog for up-to-date details on BTL listed firmware revisions on BACnet International's homepage.

OPC UA Client

Profile group UACore 1.03 Core Client Facet, Base Client Behaviour Facet^a, AddressSpace Lookup Client Facet, Attribute Read Client Facet^a, Attribute Write Client Facet^a, DataChange Subscriber Client Facet^a, Method Client Facet, UA-TCP UA-SC UA-Binary, SecurityPolicy – Basic256, SecurityPolicy – Basic256Sha256, User Token – Anonymous Facet, User Token – User Name Password Client Facet, DataAccess Client Facet, Base Event Processing Client Facet, Historical Access Client Facet, A & C Alarm Client Facet, and A & C Address Space Instance Client Facet.

a) Partly supported. See technical literature for more information.

Modbus

Modbus TCP, client and server
Modbus RTU and ASCII, RS-485, client and server

MQTT

MQTT over TLS, port configurable, default 8883
MQTT over TCP, port configurable, default 1883
MQTT over WebSocket Secure (WSS), port configurable, default 443
MQTT over WebSocket (WS), port configurable, default 80

TCP

Binary, port fixed, 4444

HTTP

Non-binary, port configurable, default 80

HTTPS

Encrypted supporting TLS 1.3, 1.2, 1.1^a, and 1.0^a, port configurable default 443

a) Disabled by default.

WSS^a

Encrypted supporting TLS 1.3, port configurable

a) BACnet/SC applications

SMTP

Email sending, port configurable, default 25

SMTPS

Email sending, port configurable, default 587

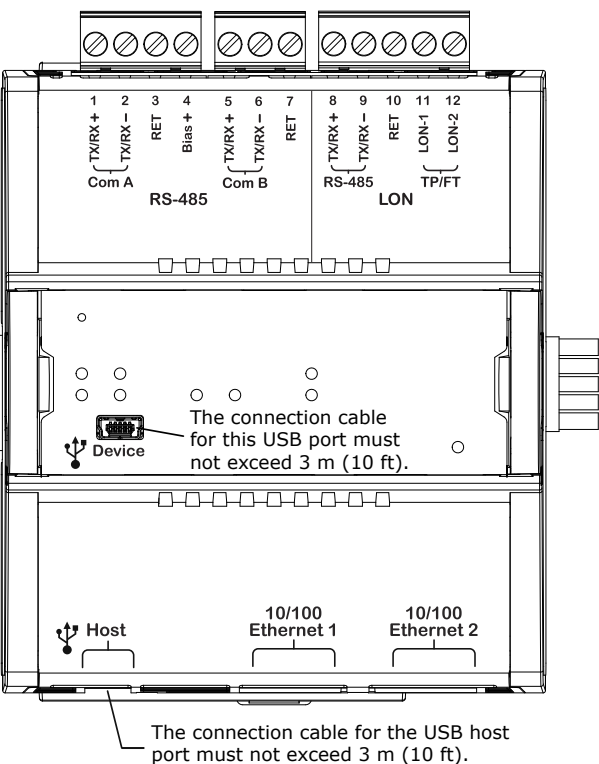
SpaceLogic AS-P

SNMP

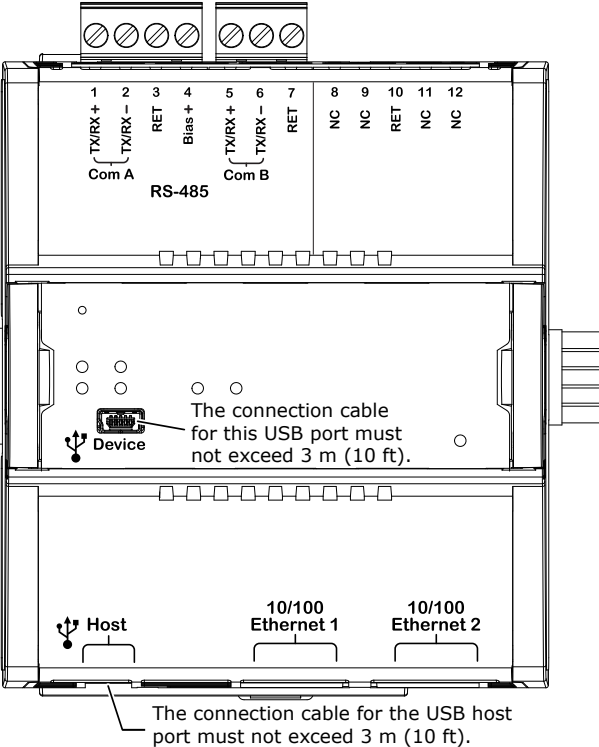
version 3
Network supervision using poll and trap
Application alarm distribution using trap

Terminals

The terminals of the AS-P and AS-P-S models are shown below.



The terminals of the AS-P-NL and AS-P-NLS models are shown below.



SpaceLogic AS-P

LNS

LNS version

OpenLNS
Installed on WorkStation PC

LonMark

Resource files version

14.00

CPU

Frequency

500 MHz

Type

SPEAr1380, ARM Cortex-A9 dual-core

DDR3 SDRAM

512 MB

eMMC memory

4 GB

Memory backup

Yes, battery-free, no maintenance

Software requirements

External log storage PostgreSQL option

Supported versions of PostgreSQL (www.postgresql.org) with matching version of TimescaleDB extension (www.timescale.com).
Note: To use compression for trend data, TimescaleDB 2.11 or later is required.

Quality assurance testing has been performed by Schneider Electric with TimescaleDB and PostgreSQL installed natively in Windows 10, Windows Server 2012, 2016, and 2019. Other deployment scenarios have not been tested by Schneider Electric.

External log storage Microsoft SQL option

Microsoft SQL Server versions under full support by Microsoft (www.microsoft.com).
The following Microsoft SQL Server editions are supported: Enterprise, Standard, and Express.

External log storage AVEVA PI System option

PI Web API 2021 SP3 and database compatible with that version

Quality assurance testing has been performed by Schneider Electric with PI Web API 2021 SP3, and database compatible with that version, installed on Windows Server 2019. Other deployment scenarios have not been tested by Schneider Electric.

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Regulatory Notices



Federal Communications Commission

FCC Rules and Regulations CFR 47, Part 15, Class B

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

Industry Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



Regulatory Compliance Mark (RCM) - Australian Communications and Media Authority (ACMA)

This equipment complies with the requirements of the relevant ACMA standards made under the Radiocommunications Act 1992 and the Telecommunications Act 1997. These standards are referenced in notices made under section 182 of the Radiocommunications Act and 407 of the Telecommunications Act.



UL 916 Listed products for the United States and Canada, Open Class Energy Management Equipment. UL file E80146.



UL 864 Listed products for the United States. 10th Edition Smoke Control System. UL file S5527.



CE - Compliance to European Union (EU)

2014/30/EU Electromagnetic Compatibility Directive

2011/65/EU Restriction of Hazardous Substances (RoHS) Directive

2015/863/EU amending Annex II to Directive 2011/65/EU

This equipment complies with the rules, of the Official Journal of the European Union, for governing the Self Declaration of the CE Marking for the European Union as specified in the above directive(s).



WEEE - Directive of the European Union (EU)

This equipment and its packaging carry the waste of electrical and electronic equipment (WEEE) label, in compliance with European Union (EU) Directive 2012/19/EU, governing the disposal and recycling of electrical and electronic equipment in the European community.



UK Conformity Assessed

S.I. 2016/1091 - Electromagnetic Compatibility Regulations 2016

S.I. 2012/3032 - Restriction of the Use of Certain Hazardous Substances in Electrical and

Electronic Equipment Regulations 2012

S.I. 2013/3113 - Waste Electrical and Electronic Equipment Regulations 2013

This equipment complies with the rules, of the UK regulations, for governing the UKCA Marking for the United Kingdom specified in the above directive(s).

www.se.com/buildings

Life Is On

Schneider
Electric