

Wireless Adapter - Advanced SpaceLogic™ Room Controllers

EcoStruxure™ Building



Introduction

SpaceLogic* Wireless Adapter - Advanced is a USB-based wireless adapter that enables Zigbee™ wireless connectivity for your SpaceLogic BACnet/IP controller or automation server, extending its point count and bringing flexibility in your retrofit applications. The adapter can be used with BACnet/IP controllers such as the RP controllers as well as automation servers such as the AS-P and AS-B servers.

An automation server equipped with the adapter can communicate over the Zigbee wireless protocol with up to 164 wireless devices, depending on the type of Zigbee device and the radio bandwidth usage of the device. An RP controller equipped with the adapter can communicate with up to 30 wireless devices.

For information on the supported wireless devices, see section “Supported Wireless Devices”.

The adapter allows post-commissioning selection of one of the 16 channels of operation in the 2.4 GHz band to improve signal transmission and reception.

The adapter works seamlessly within EcoStruxure Building Management systems so that Zigbee objects become easily available to the user.

The adapter’s compact design allows it to plug in to RP controllers or automation servers in tight spaces and the optional mounting cradle, wall plate, and USB cable extension allow for the choice of a wall, ceiling, or exterior of the enclosure mount to

Wireless Adapter - Advanced

maximize the transmission and reception of signals from distributed Zigbee devices.

In WorkStation, the firmware of the adapter will be automatically updated when you update the RP controller or automation server to which it is connected.

* Formerly known as SmartX.

Features

The adapter has the following features:

- Zigbee Certified Product (with RP controllers, AS-P and AS-B servers)

- Zigbee 3.0
- Compact design and easy to install
- Multiple mounting options
- Integrated 2.4 GHz antenna
- Wireless communication distance:
 - Line-of-sight range: Up to 50 m (164 ft)
- Allows post-commissioning channel change of the network
- Configuration and firmware update through EcoStruxure Building Operation software

Part Numbers

Product	Part number
SpaceLogic Wireless Adapter - Advanced	SXWZBAUSB10001
USB Adapter Cradle Kit Includes plastic mounting cradle and wall plate	SXWUSBCRA10001
USB Extension Cable 1 m (3 ft) Includes USB extension cable of length 1 m (3 ft)	SXWUSBCBL10001
Plenum Rated USB Extension Cable 3 m (10 ft) Includes plenum rated USB extension cable of length 3 m (10 ft)	SXWUSBCBL10002

Specifications

Wireless Adapter - Advanced	
Electrical	
DC input supply voltage a) Connected to and powered by the USB 2.0 host port on the RP controller or automation server.	5 VDC (USB) ^a
Maximum power consumption	0.3 W
Wireless connectivity	
Communication protocol	Zigbee 3.0
Frequency band	2.4 GHz (ISM band), compliant with IEEE Standard 802.15.4
Maximum output power	+10 dBm
Maximum communication distance	Line-of-sight: 50 m (164 ft)
Antenna	
Maximum total number of hops allowed in the wireless network	5
Wireless device limits for an RP controller	
Maximum total number of wireless devices connected to the wireless network a) The maximum number depends on the type of Zigbee device and the radio bandwidth usage of the Zigbee device.	Up to 30 ^a
Maximum total number of SE8000 and VT8000 room controllers	4

Wireless Adapter - Advanced

Maximum total number of Zigbee end devices paired with an RP controller 20

Maximum total number of ASSA ABLOY VingCard electronic locks 1

Wireless device limits for an automation server

Maximum total number of wireless devices connected to the wireless network Up to 164^a
 a) The maximum number depends on the type of Zigbee device and the radio bandwidth usage of the Zigbee device.

Maximum total number of Zigbee routers and Zigbee end devices 64

Maximum total number of Zigbee Green Power devices 100

Maximum total number of Zigbee end devices paired with an automation server 20

Environment

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

Ambient temperature, storage -40 to +70 °C (-40 to +158 °F)

Humidity Maximum 95 % RH non-condensing

Material

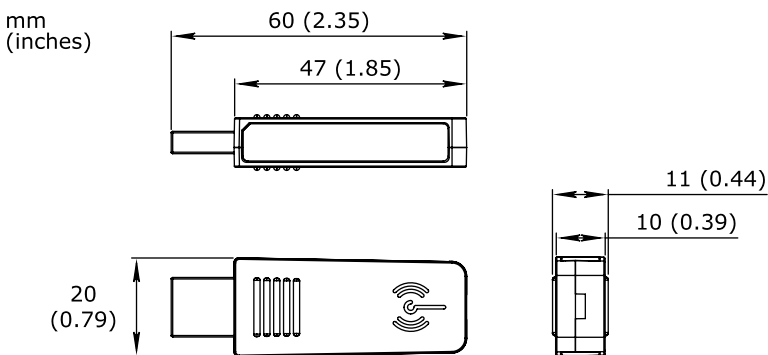
Plastic flame rating UL94 HB

Plenum rating UL 2043

Ingress protection rating IP 20

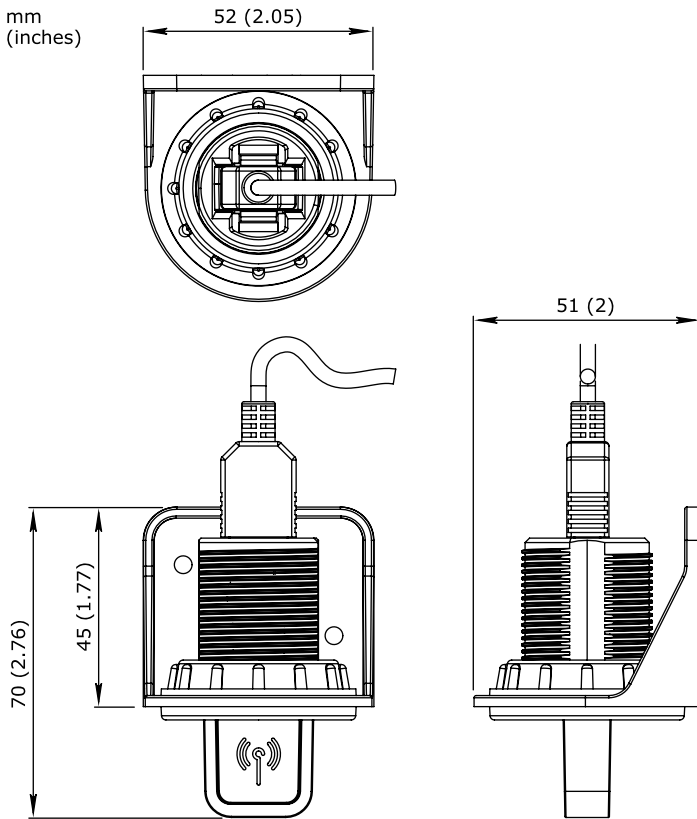
Mechanical

Dimensions, adapter See drawing below



Dimensions, mounting cradle and wall plate See drawing below

Wireless Adapter - Advanced



Weight

Adapter: 7.57 g (0.267 oz)
 Cradle and nut: 21.35 g (0.753 oz)
 Cradle, nut, and wall plate: 33.40 g (1.178 oz)

Installation

Connection to USB host port on RP controller or automation server
 Indoor use only

Installation options

Enclosure exterior
 Drop ceiling with mounting cradle (optional)
 Wall with wall plate (optional)

Maximum USB 2.0 cable length

3 m (10 ft)

Software requirements

EcoStruxure Building Operation software

version 3.2 and later

EcoStruxure Building Commission mobile application software

version 4.0 and later

RP-C controller firmware

version 3.02.xx or higher

AS-P server firmware

EcoStruxure Building Operation software version 3.2 and later

AS-B server firmware

EcoStruxure Building Operation software version 3.3 and later

Agency compliances

EMC EN 301 489-1 V2.2.3; EN 301 489-17 V3.2.2; BS/EN 55032:2015; BS/EN 55035:2017; FCC Part 15, Sub-part C, Class B; ICES-003, Class B

Radio

EN 300 328 V2.2.2

Safety standards

BS/EN 62368-1:2014; BS/EN 62311:2008; BS/EN 62479:2010

Wireless Adapter - Advanced

FCC ID	QQQ13
ISED certification number	IC: 5123A-13
Hardware	
CPU type	ARM Cortex-M4 with Floating Point Unit (FPU)
Frequency	38.4 MHz
SRAM (embedded)	64 KB
Flash memory (embedded)	512 KB
Connectors	USB 2.0, type-A connector

Supported Wireless Devices

This section provides information on the wireless devices that are supported by the wireless network.

In EcoStruxure Building Operation software version 4.0 and later, additional Zigbee 3.0 wireless devices can be supported using the Zigbee Wireless Device Support Service. For information on how support for Zigbee 3.0 devices can be added in the EcoStruxure Building Operation software through this service, see PA-00842.

SpaceLogic SE8000 and VT8000 controllers

The SE8000 and VT8000 controllers can be used for fan coil, roof top unit, heat pump, indoor air quality, and VAV control applications.

The SE8000 and VT8000 controllers without built-in wireless networking capability require the VCM8000V5045P Zigbee extended profile wireless communication adapter to be installed to enable Zigbee wireless connectivity.

The following conditions apply to the support of SE8000 and VT8000 controllers under an automation server Zigbee wireless network:

- In EcoStruxure Building Operation software version 3.3, when you connect an SE8000 or VT8000 controller via Zigbee wireless network to the automation server, you are not able to connect Zigbee devices to the SE8000 or VT8000 controller. If you already have Zigbee devices connected to the SE8000 or VT8000 controllers in the Zigbee network, you must either re-connect them to the automation server or upgrade to EcoStruxure Building Operation software version 4.0.

- When you connect SE8000 and VT8000 controllers via Zigbee wireless network to the automation server, you are not able to use multiple SE8000 or VT8000 controllers as sensors to control a single setpoint in a single zone.

The following conditions apply to the support of SE8000 and VT8000 controllers under an RP controller Zigbee wireless network:

- In EcoStruxure Building Operation software version 3.3 and version 4.0, when you connect an SE8000 or VT8000 controller via Zigbee wireless network to the RP controller, you are not able to connect Zigbee devices to the SE8000 or VT8000 controller. If you already have Zigbee devices connected to the SE8000 or VT8000 controllers in the Zigbee network, you must re-connect them to the RP controller.
- Support for SE8000 and VT8000 controllers under the RP controller Zigbee wireless network is limited to display and sensor functionality. Under the RP controller Zigbee network, they are not supported as HVAC controllers.
- When you connect SE8000 and VT8000 controllers via Zigbee wireless network to the RP controller, you are not able to use multiple SE8000 or VT8000 controllers as sensors to control a single setpoint in a single zone.

Product	Part number
Low-Voltage Fan Coil Room & Zone Controller, RH sensor & control	SE8350U0Bxx ^a
Low-Voltage Fan Coil Room & Zone Controller, RH sensor & control, PIR motion sensor	SE8350U5Bxx ^a
Low-Voltage Fan Coil Room & Zone Controller, ZigBee Embedded, RH sensor, PIR motion sensor	SE8350U5BxxP ^a

Wireless Adapter - Advanced

Continued

Product	Part number
Roof Top Unit, Heat Pump & Indoor Air Quality Controller, RH sensor & control	SE8650U0Bxx ^a
Roof Top Unit, Heat Pump & Indoor Air Quality Controller, RH sensor & control, PIR motion sensor	SE8650U5Bxx ^a
Roof Top Unit, Heat Pump & Indoor Air Quality Controller, ZigBee Embedded, RH sensor & control, PIR motion sensor	SE8650U5BxxP ^a
Line-Voltage Fan Coil Room Controller, RH sensor & control	SER8350A0Bxx ^a
Line-Voltage Fan Coil Room Controller, RH sensor & control, PIR motion sensor	SER8350A5Bxx ^a
Line-Voltage Fan Coil Room Controller, ZigBee Embedded, RH sensor & control, PIR motion sensor	SER8350A5BxxP ^a
Variable Air Volume Controller, PD/PI, RH sensor & control	SEZ8250U0Bxx ^a
Variable Air Volume Controller, PD/PI, RH sensor & control, PIR motion sensor	SEZ8250U5Bxx ^a
Variable Air Volume Controller, PD/PI, Embedded ZigBee Pro, RH sensor & control, PIR motion sensor	SEZ8250U5BxxP ^a
Low-Voltage Fan Coil Room Controller, White Case, White Fascia	VT8350U5x00B ^b
Low-Voltage Fan Coil Room Controller, Embedded ZigBee Pro, RH sensor & control, PIR motion sensor, White Case, White Fascia	VT8350U5500BP
Roof Top Unit, Heat Pump & Indoor Air Quality Controller, White Case, White Fascia	VT8650U5x00B ^b
Roof Top Unit, Heat Pump & Indoor Air Quality Controller, Embedded ZigBee Pro, RH sensor & control, PIR Motion Sensor, White Case, White Fascia	VT8650U5500BP
Fan Coil Room Controller, White Case, White Fascia	VTR8350A5x00B ^b
Fan Coil Room Controller, Embedded ZigBee Pro, RH sensor & control, PIR Motion Sensor, White Case, White Fascia	VTR8350A5500BP
Variable Air Volume Controller, PD/PI, White Case, White Fascia	VZ8250U5x00B ^b
Variable Air Volume Controller, PD/PI, Embedded ZigBee Pro, RH sensor & control, PIR motion sensor, White Case, White Fascia	VZ8250U5500BP

- a) The two characters "xx" of the part number indicate the color of the case and fascia: 00 (Silver Case, Silver Fascia), 11 (White Case, White Fascia)
 b) The character "x" of the part number indicates the sensor type of the controller: 0 (RH sensor & control), 5 (RH sensor & control, PIR motion sensor)

Wireless sensors

The wireless sensors can be used for indoor air quality, motion and occupancy, window and door status, and water leakage monitoring.

Product	Part number
CO2 with Temperature and Humidity Sensor	SED-CO2-G-5045
Temperature and Humidity Sensor	SED-TRH-G-5045
Window/Door Contact Sensor	SED-WDC-G-5045
Motion with Temperature and Humidity Sensor	SED-MTH-G-5045
Water Leak Sensor	SED-WLS-G-5045

Wireless Adapter - Advanced

SpaceLogic RP controller expansion Zigbee modules

The RP controller expansion Zigbee modules can be used for lighting control applications.

48-bit metering values are supported for greater range and precision for energy metering.

Product	Part number
RP-C-EXT-ZB-0-10V, Zigbee 0-10V module (230 VAC)	SXWREZB010110001
RP-C-EXT-ZB-DALI, Zigbee DALI module (230 VAC)	SXWREZBDALI110001

SpaceLogic TH900 Series thermostats

The TH900 Series thermostats can be used for packaged terminal air conditioner (PTAC), fan coil, heat pump, and gas and

oil furnace control applications. The TH900 Series thermostats are only supported for the automation servers.

Product	Part number
TH903 Thermostat, LCD/Buttons, Zigbee, Occupancy Sensor, Auxiliary Input, White	TH903-ZP-W
TH903 Thermostat, LCD/Buttons, Zigbee, Occupancy Sensor, Modbus, Auxiliary Input, White	TH903-ZPM-W
TH907 Thermostat, Touchscreen, Zigbee, Occupancy Sensor, Auxiliary Input, White	TH907-ZP-W
TH907 Thermostat, Touchscreen, Zigbee, Occupancy Sensor, Modbus, Auxiliary Input, White	TH907-ZPM-W
TH907 Thermostat, Touchscreen, Zigbee, Occupancy Sensor, Auxiliary Input, Black	TH907-ZP-B ^a
TH907 Thermostat, Touchscreen, Zigbee, Occupancy Sensor, Modbus, Auxiliary Input, Black	TH907-ZPM-B ^a

a) This model is manufactured on a custom basis only.

PowerLogic™ PowerTag energy sensors

The PowerTag energy sensors can be used for energy metering and monitoring, load monitoring and power availability for products and installations rated up to 2000 A.

48-bit metering values are supported for greater range and precision for energy metering.

PowerTag firmware version 004.000.424 or later is required for support in the EcoStruxure Building Operation software.

Product	Part number
PowerTag Energy M63 1P+Wire	A9MEM1520
PowerTag Energy M63 1P+N TOP	A9MEM1521
PowerTag Energy M63 1P+N BOTTOM	A9MEM1522
PowerTag Energy M63 3P	A9MEM1540
PowerTag Energy M63 3P+N TOP	A9MEM1541
PowerTag Energy M63 3P+N BOTTOM	A9MEM1542
PowerTag Energy M63 3P 230V LL	A9MEM1543
PowerTag Energy P63 1P+N TOP	A9MEM1561
PowerTag Energy P63 1P+N BOTTOM	A9MEM1562
PowerTag Energy P63 1P+N BOTTOM RCBO 18mm	A9MEM1563

Wireless Adapter - Advanced

Continued

Product	Part number
PowerTag Energy P63 3P+N TOP	A9MEM1571
PowerTag Energy P63 3P+N BOTTOM	A9MEM1572
PowerTag Energy F63 1P+N	A9MEM1560
PowerTag Energy F63 1P+N 110V LL	A9MEM1564
PowerTag Energy F63 3P+N	A9MEM1570
PowerTag Energy F63 3P	A9MEM1573
PowerTag Energy F63 3P+N 127V/220V	A9MEM1574
PowerTag Energy F160 3P/3P+N	A9MEM1580
PowerTag Energy M250 3P	LV434020
PowerTag Energy M250 3P+N	LV434021
PowerTag Energy M630 3P	LV434022
PowerTag Energy M630 3P+N	LV434023
PowerTag Energy R200 3P/3P+N	A9MEM1590
PowerTag Energy R600 3P/3P+N	A9MEM1591
PowerTag Energy R1000 3P/3P+N	A9MEM1592
PowerTag Energy R2000 3P/3P+N	A9MEM1593

Easergy wireless sensors

The Easergy wireless sensors can be used for environmental condition monitoring for enclosures and continuous thermal monitoring of critical power connections of indoor installations.

Product	Part number
Easergy CL110 Wireless Environmental Sensor	EMS59443 ^a
Easergy TH110 Wireless Thermal Sensor	EMS59440 ^b

- a) Set of two pieces.
- b) Set of three pieces.

Wiser micro module switches and dimmers

The Wiser micro module switches and dimmers can be used for lighting control applications.

Product	Part number
Wiser 1 Gang Micro Module Switch	CCT5011-0001_AS
Wiser Micro Module Light Switch	CCT5011-0002
Wiser 1 Gang Micro Module Dimmer	CCT5010-0001_AS
Wiser Micro Module Dimmer	CCT5010-0002

Wireless Adapter - Advanced

Wiser radiator thermostat

The Wiser water-based radiator thermostat can be used for room-by-room heating control.

Product	Part number
Wiser Radiator Thermostat	CCTFR6100Z3

ELKO Smart dimmer and relay puck

The ELKO Smart dimmer puck can be used for lighting control applications. The ELKO Smart relay puck can be used to control resistive, inductive, or capacitive loads.

Product	Part number
SmartDim Puck Uni 200W	EKO07090
SmartRelay Puck 10AX	EKO07144

Danfoss Ally™ radiator thermostats

The Danfoss Ally radiator thermostats can be used for room temperature regulation.

Product	Part number
Danfoss Ally™ Radiator Thermostat	014G2420 ^a
Danfoss Ally™ Radiator Thermostat	014G2460 ^b

a) Includes adapter for RA and M30 valves.

b) Includes adapter for RA, M30, RAV, and RAVAL valves.

Leviton Decora Smart™ Zigbee 3.0 switch

The Leviton Decora Smart Zigbee 3.0 switch can be used for remote lighting control applications.

Product	Part number
Decora Smart™ Zigbee 3.0 Switch	DG15S-1BW ^a

a) Includes white wall plate.

ASSA ABLOY electronic locks

The ASSA ABLOY electronic locks can be used for hotel applications with electronic door locks.

Product	Part number
Electronic Locks - VingCard Allure	See the ASSA ABLOY web site
Electronic Locks - VingCard Essence	See the ASSA ABLOY web site
Electronic Locks - VingCard Signature	See the ASSA ABLOY web site
Electronic Locks - VingCard Classic	See the ASSA ABLOY web site
Electronic Locks - VingCard Flex	See the ASSA ABLOY web site

Wireless Adapter - Advanced

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.

FCC ID: QQQ13

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.

IC: 5123A-13



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.



CE - Compliance to European Union (EU)

2014/53/EU Radio Equipment Directive (RED)

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. 2017/1206 - Radio Equipment Regulations 2017

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).



Zigbee Certified Product

www.se.com/buildings

Life Is On

Schneider
Electric