

RP-C-EXT-ZB-0-10V

SpaceLogic™ RP Controller Expansion Modules

EcoStruxure™ Building



* Formerly known as SmartX.

Introduction

SpaceLogic* RP-C-EXT-ZB-0-10V Zigbee 0-10V module communicates with the SpaceLogic RP room controller over the Zigbee™ wireless protocol and provides I/O expansion for 0-10V lighting control.

The Zigbee 0-10V module enables dimming of different types of lights equipped with electrical ballasts for 220–240 VAC line voltage. The Zigbee 0-10V module can distribute power (220–240 VAC) from an external power supply to the lights.

Lighting can be controlled by the RP-C through motion detection and light intensity measurement provided by the Multi-sensor or by SpaceLogic Sensors connected to the RP-C.

Features

The Zigbee 0-10V module has the following features:

- Wireless communication with the RP-C room controller
- 0-10V light output for control of 230 VAC powered lights (see output specification for limitations on inrush current)
- Power consumption monitoring per module
- Suitable for mounting in ceilings
- Integrated 2.4 GHz antenna
- Configuration through EcoStruxure Building Operation software

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- Status LED for the device

0-10V lighting control

The light output is connected to the power supply network through the Zigbee 0-10V module. For the 0-10 VDC control signal wires, you may use the standard installation equipment permitted for ELV (Extra-Low Voltage) installations. The 0-10 VDC control signal meets SELV (Safety Extra-Low Voltage) requirements.

Part Numbers

Product	Part number
RP-C-EXT-ZB-0-10V	SXWREZB010110001

The analog interface has the following features:

- The lights connected to the output belong to the same group and are thus controlled simultaneously (same ON / OFF / Dimming setpoint).
- Power to the ballasts is cut off when the lights are switched off.

Specifications

RP-C-EXT-ZB-0-10V	
AC input	
Nominal voltage	230 VAC
Rated voltage range	220 to 240 VAC
Frequency	50/60 Hz
Maximum load current	5 A
Maximum power consumption	<1 W
Power input protection	MOV suppression and internal fuse
AC output	
Rated voltage range	220 to 240 VAC (same as power supply)
Maximum load current	5 A
Maximum inrush current	30 A (<5 ms)
Wireless connectivity	
Communication protocol	Zigbee 3.0
Frequency band	2.4 GHz (ISM band), compliant with IEEE Standard 802.15.4
Maximum output power	7 dBm
Effective indoor radio signal range	30 m (98 ft)
Antenna	Integrated antenna
Environment	
Ambient temperature, operating	-20 °C to +50 °C (-4 °F to +122 °F)
Case temperature, maximum	75 °C (167 °F)
Ambient temperature, storage	-30 to +65 °C (-22 to +149 °F)

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Humidity	Maximum 85 % RH non-condensing
Material	
Plastic flame rating	UL94 V-0
Ingress protection rating	IP 20
Mechanical	
Dimensions	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)
Installation	Ceiling Indoor use only
Output terminals	Fixed Left side: 1 x 6-pin terminal block Right side: 1 x 2-pin terminal block
Compatibility	
EcoStruxure Building Operation	version 4.0.1 and later
Agency compliances	
EMC	ETSI EN 301 489-1 V2.1.1 (2017); ETSI EN 301 489-17 V3.1.1 (2017); BS/EN 61000-3-2:2014; BS/EN 61000-3-3:2013; BS/EN 55015:2013; BS/EN 61547:2009
Radio	ETSI EN 300 328 V2.1.1 (2016)
Safety standards	BS/EN 62493:2015; BS/EN 62479:2010; BS/EN 61347-1:2015; BS/EN 61347-2-11:2001
Power consumption monitoring	BS/EN 61010-1:2010
Hardware	
CPU type	ARM Cortex-M4 single-core
Frequency	40 MHz
SRAM (embedded)	64 KB
Flash memory (embedded)	512 KB
NOR flash memory	1 MB
Status indicator	LED (green and red) that shows the status of the device
Reset button	Push-button switch
Energy metering	
Measurement accuracy	See table below.
Measurement range	Measurement accuracy
< 50 W	+/-2 W
>= 50 W	+/-2 %
0-10V light output	
Outputs	1, terminals 0-10V AO and COM

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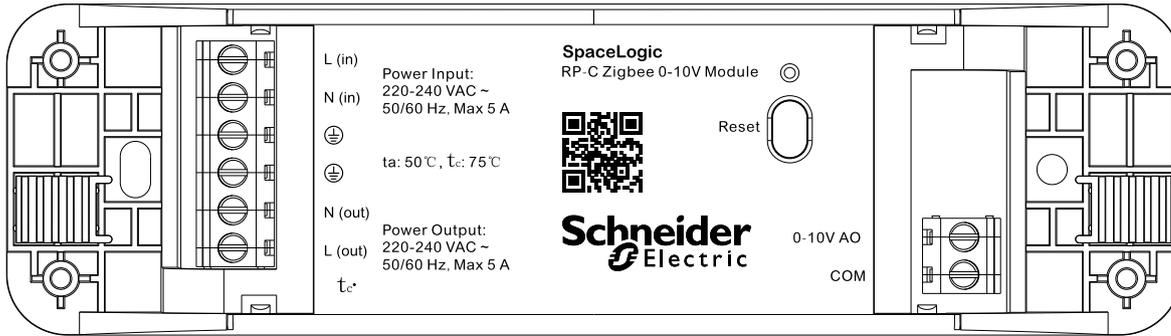
Output voltage

0 to 10 VDC

Sink current

40 mA

Terminals



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Regulatory Notices



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.



UK Conformity Assessed
S.I. 2017/1206 - Radio Equipment Regulations 2017
S.I. 2016/1101 - Electrical Equipment (Safety) 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).



CE - Compliance to European Union (EU)
2014/53/EU Radio Equipment Directive (RED)
2014/35/EU Low Voltage 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.



Zigbee Certified Product

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