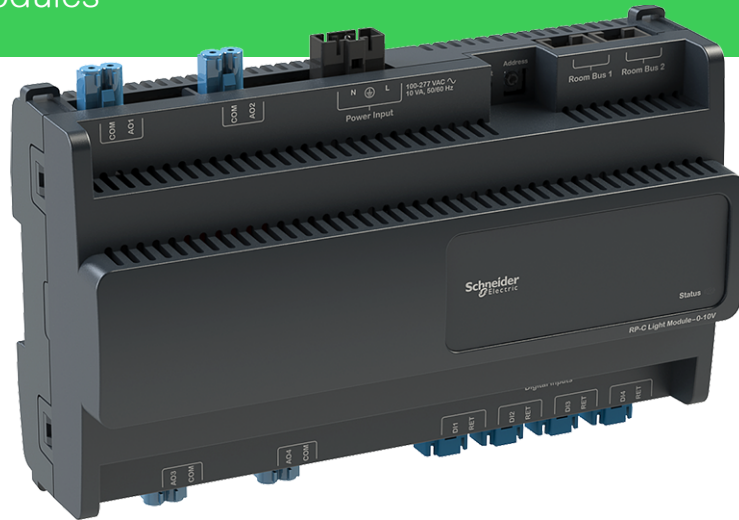


RP-C-EXT-0-10V-4

RP Series Expansion Light Modules



0-10V light module without power distribution

Introduction

The RP-C-EXT-0-10V-4 light module connects to the RP-C room controllers and provides I/O expansion for 0-10V lighting control.

The 0-10V light module enables control of lights equipped with 0-10V ballasts.

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

The 0-10V light module is part of the RP Series expansion modules for connected room solution and can be combined with other modules from this product range.

Features

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

- Power and communications through the room bus
- Four light control outputs
- Four digital inputs for connection of light switches and window contacts
- Suitable for mounting in ceilings
- Wieland connectors for quick and easy installation
- Engage mobile application for room comfort settings
- Status LED for the device
- Rotary switch for address configuration

0-10V lighting control

The analog interface has the following features:

- Independent control of each of the four outputs.
- The lights on each output belong to the same group and are thus controlled simultaneously (same ON / OFF / Dimming setpoint).

Room bus

The RP-C room bus allows RP Series expansion modules and multi-sensors to be connected to the controller for motion detection, luminosity measurements, communication with remote control (RP-C-RC-BLE), and control of electric lights and window blinds.

The RP-C room bus supports up to six connected RP Series expansion modules and multi-sensors with the following restrictions:

- Maximum of two DALI light modules
- Maximum of two SMI blind modules
- Maximum of four multi-sensors

Maximum total length of the room bus is 72 m (236 ft).

Engage mobile application

The Engage mobile application enables control of room temperature, fan speed, lights, and blinds/shades directly from a smartphone. A user can manage these settings when the application is connected to the RP-C controller.

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RP Series Expansion Light Modules

The Engage mobile application is free and available for download from Google Play and Apple App Store.

For more information, see the Engage Specification Sheet.

Part Numbers

Product	Part number
RP-C-EXT-0-10V-4	SXWRE010410001
DIN-RAIL-CLIP, DIN-rail end clip	SXWDINEND10001
package of 25 pieces	

Specifications

Electrical

Nominal voltage	100 to 277 VAC
Operating voltage range	+/-10 %
Frequency	50/60 Hz
Power consumption.....	10 VA
Room bus power consumption	0.3 W (24 VDC)
Overvoltage category	III

Environment

Ambient temperature, operating	0 to 50 °C (32 to 122 °F)
Ambient temperature, storage	-20 to +70 °C (-4 to +158 °F)
Humidity.....	20 to 90 % RH non-condensing
Pollution degree.....	2

Material

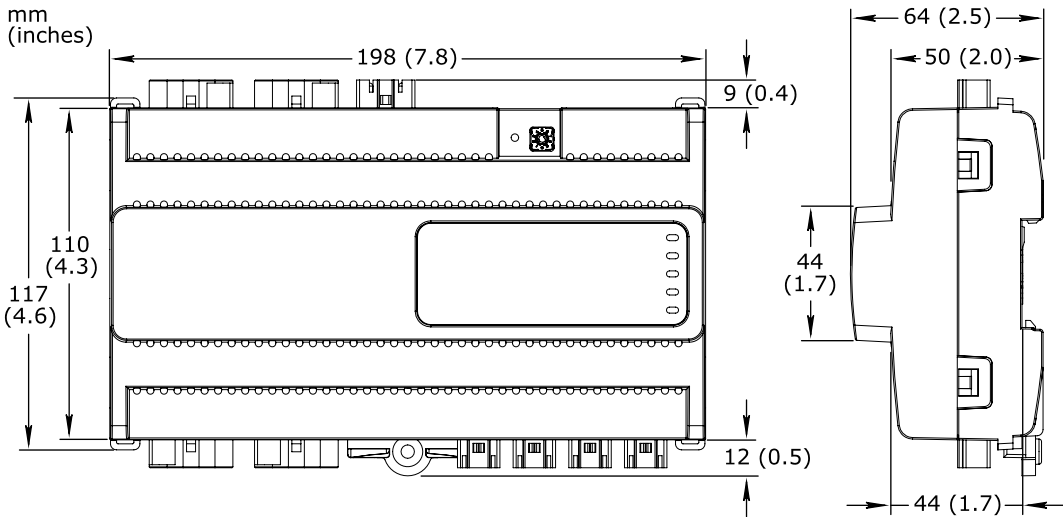
Plastic flame rating	UL94 V-0
Ingress protection rating	IP 20

RP-C-EXT-0-10V-4

RP Series Expansion Light Modules

Mechanical

Dimensions198 W x 110 H x 64 D mm (7.8 W x 4.3 H x 2.5 D in.)



Weight0.438 kg (0.965 lb)

InstallationDIN rail or flat surface

ConnectorsPower input: 1 x 3-pin Wieland GST15i3 connector
.....Light outputs: 4 x 2-pin Wieland GST15i2 connector
.....Digital inputs: 4 x 2-pin Wieland GST15i2 connector

Software compatibility

EcoStruxure Building Operation softwareversion 3.2 and later

Agency compliances

Emission.....RCM; EN 61000-6-3; EN 50491-5-2; FCC Part 15, Sub-part B, Class B

ImmunityEN 61000-6-2; EN 50491-5-3

Safety standards.....EN 60730-1; EN 60730-2-11; EN 50491-3; UL 916 C-UL US Listed

Fire performance in air-handling spaces^a UL 2043

a) The RP-C-EXT-0-10V-4 light module is approved for plenum applications.

Communication ports

Room bus.....RS-485

.....Dual RJ45 ports for daisy-chain configurations

.....Use a Cat 5 (or higher) cable

.....Maximum total length of the room bus: 72 m (236 ft)

Room bus protectionTransient voltage suppressors on communication and power signals

Hardware

CPU typeARM Cortex-M4 single-core

Frequency80 MHz

SRAM (embedded)320 KB

Flash memory (embedded)512 KB

NOR flash memory16 MB

RP-C-EXT-0-10V-4

RP Series Expansion Light Modules

Status indicatorLED (green and red) that shows the status of the device
 Address switchRotary switch 0 to 9
 Set buttonPush-button switch

0-10V light outputs

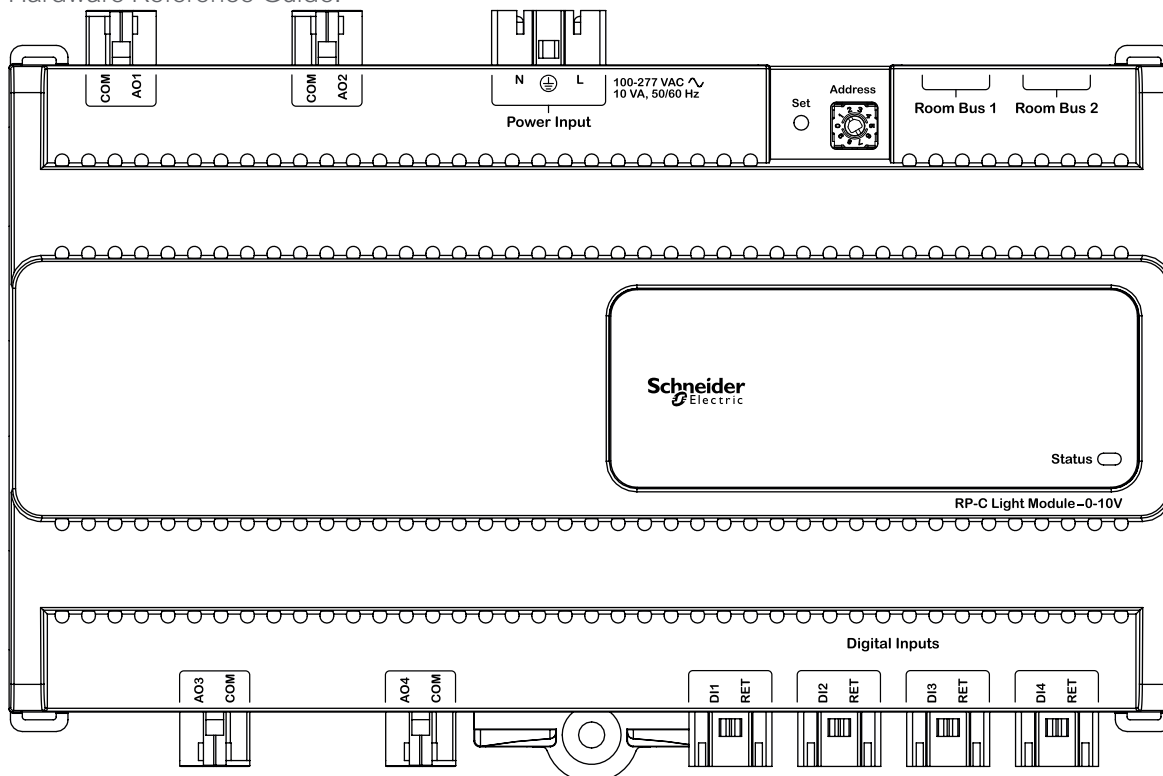
Outputs4, Light 1 to Light 4
 Output terminalsAO_n (n: 1 to 4) and COM
 Analog output voltage0 to 10 VDC
 Maximum source/sink current10 mA per output

Digital inputs

Inputs4, DI1 to DI4
 RangeDry contact, 0 to 5.0 VDC, 2.2 mA

Connections

Follow proper installation wiring diagrams and instructions. For more information on wiring, see Hardware Reference Guide.



RP-C-EXT-0-10V-4

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RP Series Expansion Light Modules

Required External Connectors

Use	Part number	Reference	Connector type	Suitable for cable diameters mm (inches)	Marking	Color of coding / housing	Minimum order quantity
Power supply input	SXWRPCCONW WPOW	91.931.4053.1	Female	5.6–11 (0.22–0.43)	L, PE, N	Black /Black	100
Light outputs	SXWRPCCONW WLIGHT2	91.922.3353.0	Male	6–7.7 (0.24–0.30)	2, 1 2: AO1..4 1: COM	Light blue /White	100
Digital inputs	SXWRPCCONW DI	91.921.2353.0	Female	3.4–5.5 (0.14–0.21)	1, 2 1: DI1..4 2: RET	Light blue /White	100

The external connectors need to be ordered separately. The connectors can be ordered in quantities of 50 or 100 from Schneider Electric using the above part numbers. The connectors can also be ordered directly from Wieland using the above reference numbers. For more information, see the Wieland Electric web site.

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.

CE - Compliance to European Union (EU)

2014/30/EU Electromagnetic Compatibility Directive

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) per the provisions of the following standards: EN 60730-1, EN 60730-2-11, and EN 50491-3 Safety Standards.



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.



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