

# A9XMSB11

## Communication Module, EcoStruxure I/O Smart Link, Modbus, RS485



### Main

Range of product	EcoStruxure
Product name	EcoStruxure I/O Smart Link
Product or component type	Smart communication module
Device short name	I/O Smart Link
Application type	Load control Breaker status monitoring Basic energy metering E
Number max of connected devices	Up to 11 wired devices
Group of channels	1 group of 11 digital channels
Maximum supply current	1.5 A
[Us] rated supply voltage	24 V DC +/- 20 %
Connectivity to devices	Digital input and output Pulse output meter
Communication service	Modbus server for RS485
Web server	BMS controller compatible
Web services	Web page

### Complementary

Application specific I/O	Pulse totalising counter Pulse converter
Protection type	Against reverse polarity for auxiliary supply Against reverse polarity for input Overvoltage at 33 V DC for digital output
Immunity to microbreaks	10 ms
Reset	Factory reset on front face By booted push-button By address encoder By plug in, plug out the power supply
Input/output type	2 inputs + 1 output per digital channel
Input type	Current sink for digital input, 24 V DC +/- 20 % at 2.5 mA
Maximum permanent current	5 mA for digital input
Electronic filtering time	2 ms for digital input from state 0 to state 1
Output type	Logic current source: 24 V - DC - 100 mA
Maximum voltage drop	<1 V at state 1 digital output
Inrush current	0.5 A for digital output 7 A for power supply
Local signalling	Communication: 1 LED (yellow) Status: 1 LED (green, orange and red)
Type of setting	Modbus address 01...99 for address encoders Reset for address encoders Reset for plug in, plug out the auxiliary supply
Mounting position	Horizontal and vertical on DIN rail
Colour	White (RAL 9003)
Location of connection	Front

Connections - terminals	Spring-loaded terminal Ti24 qty: 11 for digital input/output, ordered separately Plug-in connector qty: 1 for supply circuit Plug-in connector qty: 1 for communication bus
Clamping connection capacity	2 x 0.2...2 x 1.5 mm <sup>2</sup> for twisted shielded pairs cable, flexible with cable end for communication bus 2 x 0.2...2 x 1.5 mm <sup>2</sup> for twisted shielded pairs cable, flexible without cable end for communication bus 2 x 0.2...2 x 1.5 mm <sup>2</sup> for twisted shielded pairs cable, rigid with cable end for communication bus 2 x 0.2...2 x 1.5 mm <sup>2</sup> for twisted shielded pairs cable, rigid without cable end for communication bus 1 x 0.2...1 x 1.5 mm <sup>2</sup> , flexible with cable end for control 1 x 0.2...1 x 1.5 mm <sup>2</sup> , flexible without cable end for control 1 x 0.2...1 x 1.5 mm <sup>2</sup> , rigid with cable end for control 1 x 0.2...1 x 1.5 mm <sup>2</sup> , rigid without cable end for control 2 x 0.2...2 x 1.5 mm <sup>2</sup> , flexible with cable end for supply circuit 2 x 0.2...2 x 1.5 mm <sup>2</sup> , flexible without cable end for supply circuit 2 x 0.2...2 x 1.5 mm <sup>2</sup> , rigid with cable end for supply circuit 2 x 0.2...2 x 1.5 mm <sup>2</sup> , rigid without cable end for supply circuit
Wire stripping length	Control: 10 mm Supply circuit: 7 mm Communication bus: 7 mm
Communication network type	RS485 Modbus RTU client/server SUB-D 9 4800 bps, 9600 bps, 19200 bps, 38.4 Kbps
9 mm pitches	0 useful
Height	22.5 mm
Width	359 mm
Depth	42 mm
Net weight	188 g
Provided equipment	Set of 1 bus connector Set of 1 power supply connector Set of 2 locking clips
Range compatibility	Acti 9 iTL auxiliary Linergy Linergy FM Acti 9 iOF+SD 24 Acti 9 iACT24 Acti 9 iATL24 PowerLogic pulse output meter Acti 9 RCA iC60 Acti 9 Acti9 iCT auxiliary Acti 9 Acti9 iC60 Acti 9 Acti9 iID Acti 9 Acti9 iSW-NA Acti 9 Acti9 iDPN Vigi Acti 9 Acti9 C40 Multi9 Multi9 C60 Acti 9 Acti9 DT40 Acti 9 Acti9 DT60 Acti 9 Acti9 I-NA Acti 9 Acti9 ITG40 Acti 9 Acti9 iDPN Acti 9 Acti9 Reflex iC60 Ti24 connector
Commissioning interface	EcoStruxure Power Commission Web page
Market segment	Buildings Small commercial
Compatibility code	Acti 9 Smartlink

## Environment

IP degree of protection	IP20
IK degree of protection	IK06 conforming to IEC 62262
Pollution degree	3
Electromagnetic compatibility	Resistance to electrostatic discharge (air discharge), class B, 8 kV, conforming to IEC 61000-4-2 Resistance to electrostatic discharge (contact discharge), class B, 4 kV, conforming to IEC 61000-4-2 Resistance to radiated electromagnetic fields (80 MHz...3 GHz), class A, 10 V/m, conforming to IEC 61000-4-3 Power supply: resistance to radiated electromagnetic fields (1.4...6 GHz), class A, 3 V/m, conforming to IEC 61000-4-3 Power supply: resistance to fast transient (5...100 kHz), class B, 2 kV, conforming to IEC 61000-4-4 Input/Output: resistance to fast transient, class B, 1 kV, conforming to IEC 61000-4-4 Communication bus: resistance to fast transient (0.15...80 MHz), class B, 1 kV, conforming to IEC 61000-4-4 Conducted EMC (0.15...80 MHz), class A, 3 V, conforming to IEC 61000-4-6 Conducted emission (0.15...30 MHz), class B, conforming to IEC 61326-1 Conducted emission (0.15...30 MHz), class B, conforming to CISPR 11 Radiated emission (30...6000 MHz), class B, conforming to IEC 61326-1 Radiated emission (30...6000 MHz), class B, conforming to CISPR 11 Power supply: surges (DM coupling 42 Ohm), class B, 1 kV, conforming to IEC 61000-4-5 Power supply: surges (CM coupling 42 Ohm), class B, 2 kV, conforming to IEC 61000-4-5 Communication bus: surges (CM coupling 2 Ohm), class B, 1 kV, conforming to IEC 61000-4-5
Environmental characteristic	Corrosive 3C2 conforming to IEC 60721-3-3 Salt mist 2 conforming to IEC 60068-2-52
Vibration resistance	1 gn, amplitude = 3.5 mm (f = 5...300 Hz)10 cycles conforming to EN/IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Fire resistance	Other parts: 650 °C ( 30 s ) conforming to IEC 60695-2-10 On connection terminals: 960 °C ( 30 s ) conforming to IEC 60695-2-10
Tropicalisation	2
Relative humidity	0...93 % at 40 °C
Operating altitude	0...2000 m
Ambient air temperature for operation	-25...60 °C
Ambient air temperature for storage	-40...85 °C
Standards	IEC 61010-2-201 IEC 61010-1

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.4 cm
Package 1 Width	6.4 cm
Package 1 Length	36.4 cm
Package 1 Weight	271.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	32
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	9.063 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

## Contractual warranty

Warranty	18 months
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