

Product data sheet

Specifications



Acti9 Smartlink SI B - Modbus TCP/IP and Wireless communication module

A9XMZA08

Main

Range of product	Acti 9
Product name	Acti 9 Smartlink
Product or component type	Smart communication module
Device short name	Smartlink SI B Ethernet
Application type	Basic energy metering E Improved load monitoring E, U, I, P, Pf Load alarming Load control Breaker status monitoring
Number max of connected devices	Up to 7 wired devices Up to 20 wireless devices
Group of channels	1 group of 7 digital channels 1 group of 1 analog channel
Maximum supply current	1.5 A
[Us] rated supply voltage	24 V DC +/- 20 %
Connectivity to devices	Analog input Digital input and output Pulse output meter Wireless energy sensor
Communication service	Ethernet Modbus TCP/IP server Web server
Web server	BMS controller compatible Embedded web page
Transmission support medium	Radio frequency 2.4...2.4835 GHz PowerTag 20
Web services	Web page

Complementary

Application specific I/O	Pulse converter Pulse totalising counter
Protection type	Short-circuit protection for analog input 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
Input/Output type	2 inputs per analog channel 2 inputs + 1 output per digital channel
Input type	Current for analog input, 4...20 mA Voltage for analog input, 0...10 V DC

	Current sink for digital input, 24 V DC +/- 20 % at 2.5 mA
Maximum permanent current	0.005 A for digital input
Absolute accuracy error	+/- 1 % of full scale for analog input 12 bits
Electronic filtering time	2 ms for digital input from state 0 to state 1 2 ms for analog 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 3 A for power supply
Local signalling	Communication: 1 LED (yellow) NS (Network Status): 1 LED (green, orange and red) Communication (LK/ACT 10/100): 1 LED (green and yellow) Status: 1 LED (green, orange and red)
Mounting position	Horizontal and vertical on DIN rail
Colour	White (RAL 9003)
Location of connection	Front
Connections - terminals	Spring-loaded terminal Ti24 qty: 7 for digital input/output, ordered separately RJ45 connector qty: 1 for ETHERNET, ordered separately Plug-in connector qty: 1 for supply circuit Plug-in connector qty: 1 for communication bus Plug-in connector qty: 1 for analog input
Clamping connection capacity	2 x 0.25 mm² for twisted shielded pairs cable, flexible with cable end for communication bus 2 x 0.25 mm² for twisted shielded pairs cable, flexible without cable end for communication bus 2 x 0.25 mm² for twisted shielded pairs cable, rigid with cable end for communication bus 2 x 0.25 mm² for twisted shielded pairs cable, rigid without cable end for communication bus 2 x 0.25...2 x 1.5 mm² for twisted shielded pairs cable, rigid with cable end for analog input 2 x 0.25...2 x 1.5 mm² for twisted shielded pairs cable, rigid without cable end for analog input 2 x 0.25...2 x 1.5 mm² for twisted shielded pairs cable, flexible with cable end for analog input 2 x 0.25...2 x 1.5 mm² for twisted shielded pairs cable, flexible without cable end for analog input 1 x 0.5...1 x 1.5 mm², flexible with cable end for control 1 x 0.5...1 x 1.5 mm², flexible without cable end for control 1 x 0.5...1 x 1.5 mm², rigid with cable end for control 1 x 0.5...1 x 1.5 mm², rigid without cable end for control 2 x 0.2...2 x 1.5 mm², flexible with cable end for supply circuit 2 x 0.2...2 x 1.5 mm², flexible without cable end for supply circuit 2 x 0.2...2 x 1.5 mm², rigid with cable end for supply circuit 2 x 0.2...2 x 1.5 mm², rigid without cable end for supply circuit
Wire stripping length	Control: 10 mm Supply circuit: 7 mm Analog input: 7 mm Communication bus: 7 mm
Communication network type	RS485 Modbus RTU master SUB-D 9 9.6...19.2 kbauds Ethernet Modbus TCP/IP server RJ45 10/100 Mbit/s
9 mm pitches	0 useful
Height	22.5 mm
Width	359 mm
Depth	42 mm
Net weight	180 g
Provided equipment	Set of 1 connector Set of 1 bus connector Set of 1 power supply connector Set of 2 locking clips
Range compatibility	iTL auxiliary C60 Linergy FM iOF+SD 24 iACT24 iATL24 pulse output meter Modbus meter PowerTag wireless energy sensor RCA iC60 Acti 9 iCT auxiliary Acti9 iC60 Acti9 iID Acti9 iSW-NA Acti9 iDPN Vig Acti 9 C40 Acti 9 DT40

	Acti 9 DT60 Acti 9 I-NA Acti9 ITG40 Acti 9 iDPN Acti 9 Reflex iC60 Ti24 connector
Commissioning interface	ECOREACH Web page
Compatibility code	Acti 9 Smartlink IP

Environment

IP degree of protection	IP20
Pollution degree	3
Electromagnetic compatibility	Resistance to electrostatic discharge (air discharge), 8 kV, conforming to IEC 61000-4-2 Resistance to electrostatic discharge (contact discharge), 4 kV, conforming to IEC 61000-4-2 Resistance to radiated electromagnetic fields (80 MHz...3 GHz), 10 V/m, conforming to IEC 61000-4-3 Power supply: resistance to fast transient (5...100 kHz), 2 kV, conforming to IEC 61000-4-4 Input/output: resistance to fast transient, 1 kV, conforming to IEC 61000-4-4 Communication bus: resistance to fast transient, 1 kV, conforming to IEC 61000-4-4 Conducted EMC (0.15...80 MHz), 10 V, conforming to IEC 61000-4-6 Immunity to magnetic fields at network frequency, 30 A/m, conforming to IEC 61000-4-8 Radiated emission (30...1000 MHz), class A, conforming to IEC 61131-3 Ed.3 Conducted emission (0.15...30 MHz), class A, conforming to IEC 61131-2
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 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	93 % at 40 °C
Operating altitude	0...2000 m
Ambient air temperature for operation	-25...60 °C
Ambient air temperature for storage	-40...80 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	323 g
Package 1 Height	3.4 cm
Package 1 width	6.3 cm
Package 1 Length	36.7 cm
Unit Type of Package 2	S03
Number of Units in Package 2	32
Package 2 Weight	10.839 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes

EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information