

# Product data sheet

Specifications



## Speed monitoring 1 Sin/Cos encoder expansion module with screw term

XPSMCMEN0100SC

### Main

Range Of Product	Preventa Safety automation
Product Or Component Type	Safe speed monitoring module
Device Short Name	XPSMCM
Electrical Connection	Screw terminal
[Us] Rated Supply Voltage	24 V - 20...20 % DC
Discrete Input Voltage	24 V DC
Function Of Module	Speed monitoring

### Complementary

Power Consumption In W	3 W
Power Dissipation In W	3 W
Integrated Connection Type	Backplane expansion bus
Safety Level	Can reach category 4 conforming to ISO 13849-1 Can reach PL = e conforming to ISO 13849-1 Type 4 conforming to IEC 61496-1 SILCL 3 conforming to IEC 62061
Quality Labels	CE
Number Of Terminal Blocks	4
Local Signalling	1 LED green with PWR marking for power ON 1 LED green with RUN marking for RUN (status) 1 LED red with E IN marking for internal error 1 LED red with E EX marking for external error 2 LEDs orange with ADDR marking for node address 1 LED yellow with ENC marking for encoder connection status 2 LEDs yellow with PROX marking for proximity sensors connection status 2 LEDs yellow with SH marking for speed monitoring status
Connections - Terminals	2 captive screw clamp terminals, removable terminal block 1 captive screw clamp terminals, removable terminal block
Maximum Input Frequency	5 kHz for sensor 500 kHz for encoder SinCos
Sensor Type	Inductive proximity sensor
Electrical Connection	1 connector RJ45 conforming to EIA/TIA-568-A
Cable Cross Section	0.2...2.5 mm² - AWG 24...AWG 14 flexible cablewithout cable end 0.2...2.5 mm² - AWG 24...AWG 14 solid cablewithout cable end 0.25...2.5 mm² - AWG 23...AWG 14 flexible cablewith cable end, with bezel 0.25...2.5 mm² - AWG 23...AWG 14 flexible cablewith cable end, without bezel 0.2...1.5 mm² - AWG 24...AWG 16 flexible cablewithout cable end 0.25...1 mm² - AWG 23...AWG 18 flexible cablewith cable end, without bezel 0.5...1.5 mm² - AWG 20...AWG 16 flexible cablewith cable end, with double bezel 0.2...1 mm² - AWG 24...AWG 18 solid cablewithout cable end
Mounting Support	Omega 35 mm DIN rail conforming to EN 50022

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Depth	22.5 mm
Height	99 mm
Width	114.5 mm
Net Weight	0.28 kg

## Environment

Standards	IEC 61496-1 IEC 61508 IEC 61800-5-1 IEC 62061 ISO 13849-1
Product Certifications	cULus TÜV RCM
Ip Degree Of Protection	IP20 (enclosure)
Ambient Air Temperature For Operation	-10...55 °C
Ambient Air Temperature For Storage	-20...85 °C
Relative Humidity	10...95 %
Pollution Degree	2
[Uimp] Rated Impulse Withstand Voltage	4 kV conforming to IEC 61800-5
Insulation	250 V AC between power supply and housing conforming to IEC 61800-5-1
Overvoltage Category	II
Electromagnetic Compatibility	Electrostatic discharge immunity test - test level: 6 kV (on contact) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 20 kV (on air) conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 10 V/m (80...1000 MHz) conforming to IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 30 V/m (1.4 GHz...2 GHz) conforming to IEC 61000-4-3
Vibration Resistance	+/-0.35 mm (f= 10...55 Hz) conforming to IEC 61496-1
Shock Resistance	10 gn (duration = 16 ms) for 1000 shocks on each axis conforming to IEC 61496-1
Service Life	20 year(s)

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	4.2 cm
Package 1 Width	12.5 cm
Package 1 Length	16.1 cm
Package 1 Weight	227.0 g
Unit Type Of Package 2	S01
Number Of Units In Package 2	6
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.587 kg

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)

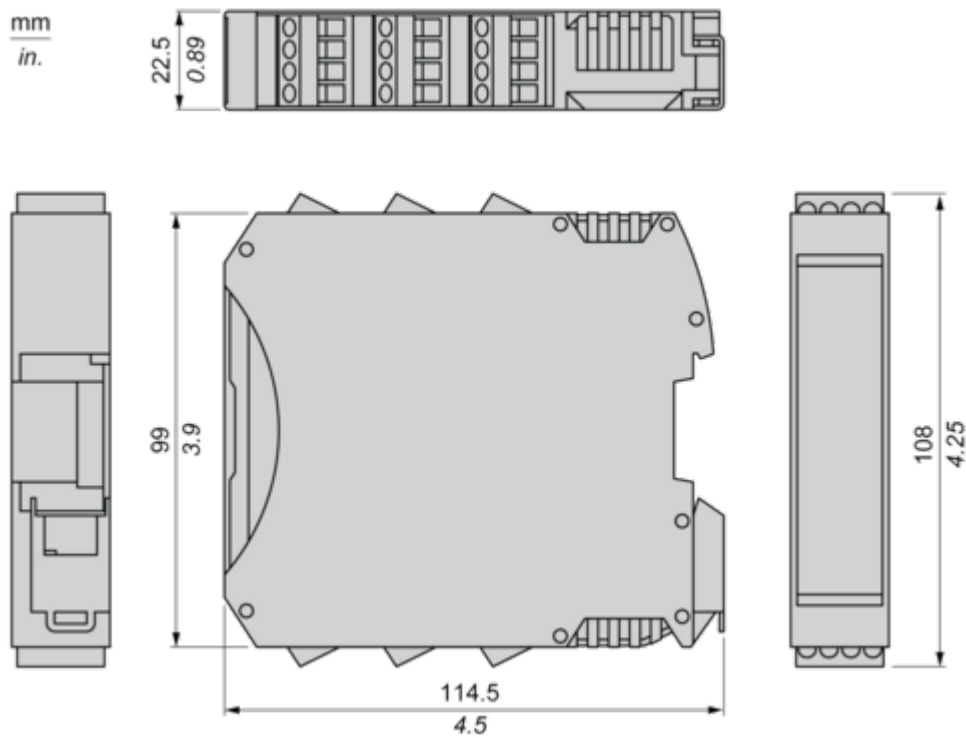
## Well-being performance

✓	Reach Free Of Svhc	
✓	Mercury Free	
✓	Rohs Exemption Information	Yes
✓	Pvc Free	
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>	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>	

Dimensions Drawings

Dimensions

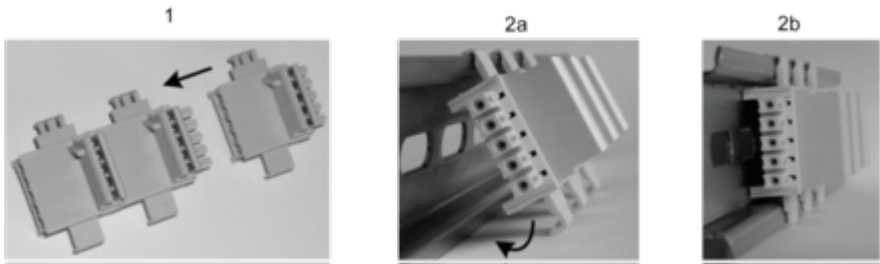
Screw Terminal



Mounting and Clearance

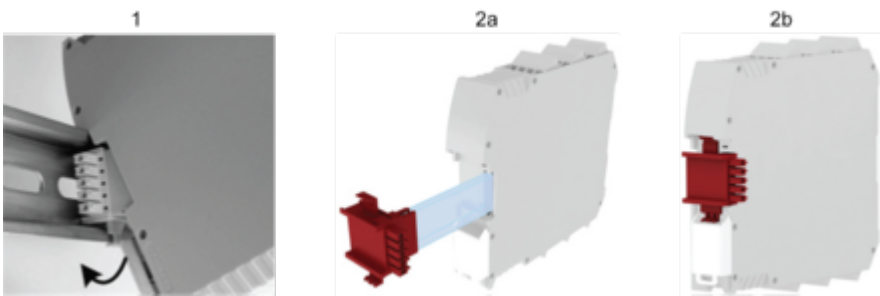
Mounting Safety Controller CPU with Module(s)

Mount BackPlane Connector on Rail



- 1 : Connect as much Backplane Connector as module to be install.
- 2 : Fix the connectors to the rail (Top first).

Mount Safety Controller CPU with Other Module(s)

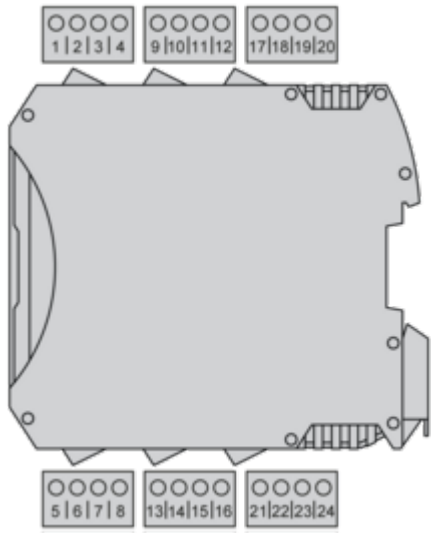


- 1 : Mount controller CPU and modules on rail.
- 2 : Make sure that the controller CPU or the module(s) are plugged on the BackPlane connector.

Connections and Schema

Wiring

Terminal Designation



Terminal	Signal	Description
1	24 VDC	24 VDC power supply
2	NODE_ADDR0	Node selection
3	NODE_ADDR1	
4	0 VDC	0 Vdc power supply
5	PROXY1_24V	PROXIMITY 1 connections
6	PROXY1_REF	
7	PROXY1_NO	
8	PROXY1_NC	
9	PROXY2_24V	PROXIMITY 2 connections
10	PROXY2_REF	
11	PROXY2_NO	
12	PROXY2_NC	
13	not connected	not connected
14		
15		
16		

