



WI180C-PB

Fieldbus modules

INTEGRATION MODULES AND ADAPTERS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
WI180C-PB	6052566

Other models and accessories → www.sick.com/Fieldbus_modules

Detailed technical data

Features

Accessory group	Fieldbus modules
Description	Features: Profibus DP-V1 slave; transmission rate of 9.6 kbit/s – 12 Mbit/s; D-Sub connection (RS485), 9-pin, Profibus; M8 connection, 4-pin; access to all parameters of the connected sensors possible. See operating instructions for additional information and technical details
Enclosure rating	IP50
Dimensions (W x H x L)	39 mm x 38.2 mm x 102.55 mm

Certificates

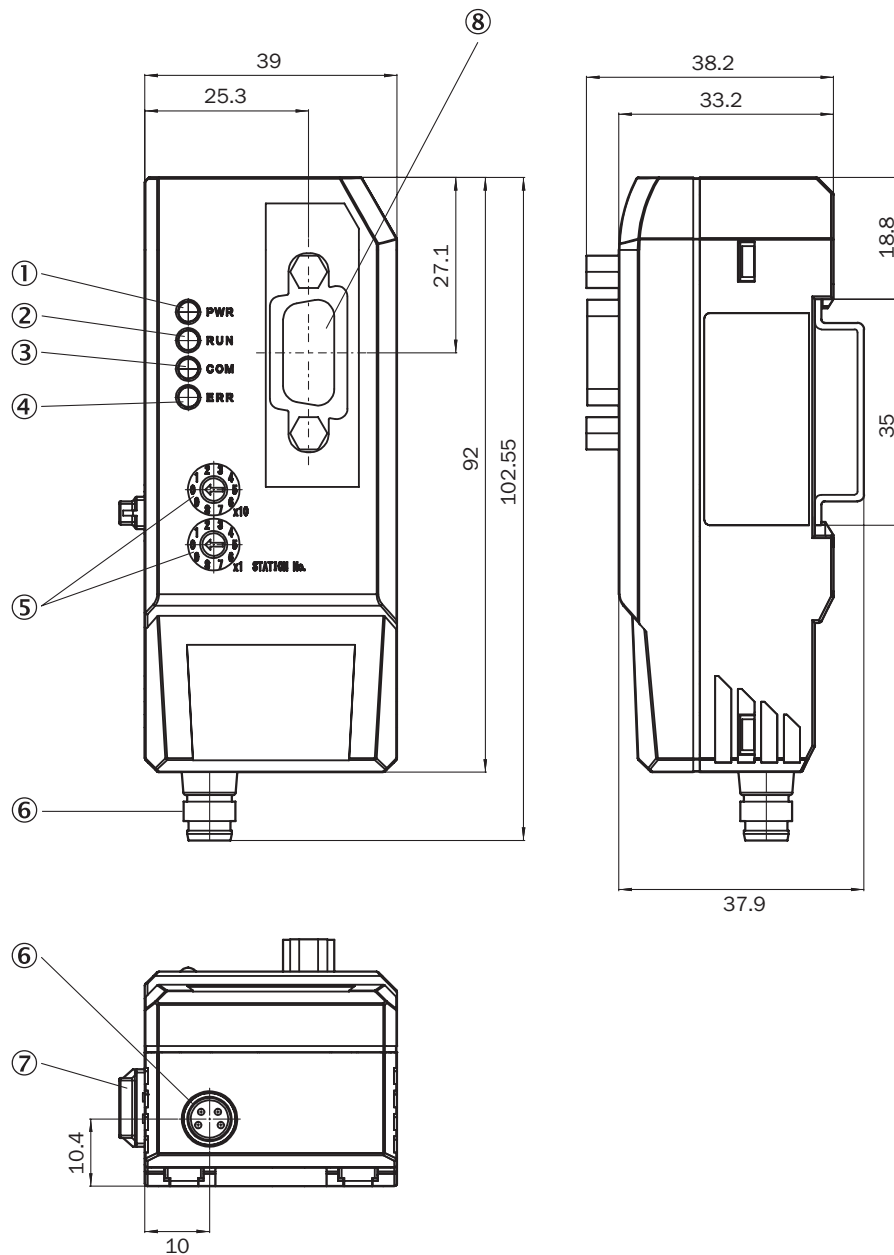
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cRUus certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Classifications

ECLASS 5.0	27242202
ECLASS 5.1.4	27242602
ECLASS 6.0	27242602
ECLASS 6.2	27242602
ECLASS 7.0	27242602
ECLASS 8.0	27242602
ECLASS 8.1	27242602

ECLASS 9.0	27242602
ECLASS 10.0	27242602
ECLASS 11.0	27242602
ECLASS 12.0	27242602
ETIM 5.0	EC001597
ETIM 6.0	EC001597
ETIM 7.0	EC001597
ETIM 8.0	EC001597
UNSPSC 16.0901	32151705

Dimensional drawing



Dimensions in mm (inch)

- ① status indicators
- ② Communication indicator
- ③ Sensor communication indicator
- ④ Communication error indicator
- ⑤ switch setting
- ⑥ Power connection: male connector M8, 4-pin
- ⑦ Bus male connector, 5-pin
- ⑧ PROFIBUS connection, D-sub, 9-pin

Technical data

Technical data

	Description	Value
Electrical	Supply voltage	12 – 24 VDC ± 10%
	Power consumption	2 W
	Switch-on delay (WI180C-PB)	500 ms
	Switch-on delay (overall system)	2000 ms
	Profile	PROFIBUS DP-V0
	Maximum number of modules to be connected	16
	Transmission rates in kbit/s	9.6/19.2/45.45/93.75/187.5/500/1.500/3.000/6.000/12.000
	Maximum distance between nodes	1.200 m @ 9.6 – 93.75 kbit/s 1.000 m @ 187.5 kbit/s 400 m @ 500 kbit/s 200 m @ 1.500 kbit/s 100 m @ 3.000 – 12.000 kbit/s
	Process data	2x output, 1x input, 14 bits of received light, error status *
	Asynchronous data	Fieldbus index map
	Transmission interface	RS-485
	LEDs	PWR, RUN, COM, ERR (3x green, 1x red)
	Power supply	Male M8 plug connector, 4-pin
	Other interfaces	Male bus connector, 5-pin, internal system bus
		D-sub, 9-pin, PROFIBUS
EMC	Noise immunity (Length of cable ≤30 m)	in accordance with EN 61000-6-2/ EN 61131-2
	Emission	in accordance with EN 55011, class A
Product safety	Protection class	3
	Short-circuit protection	in accordance with VDE 0160
Mechanical	Protection category	IP50
	Sensitivity to vibrations	IEC 68, 10 – 55 Hz
	Shock resistance	IEC 68, 500 m/s² (~50 G)
	Housing material	Polycarbonate
	Dimensions (HxWxD) in mm	39.2 x 102.55 x 39
	Connections	M8, 4-pin, power supply D-sub, 9-pin, PROFIBUS Male bus connector, 5-pin, bus connector
Environmental parameters	Air humidity (operation/storage)	35 – 85% relative humidity
	Temperature range (storage)	-40 – +70 °C
	Temperature range (Operation, ≤3 connected devices)	-25 – +55 °C
	Temperature range (Operation, ≤8 connected devices)	-25 – +50 °C
	Temperature range (Operation, ≤16 connected devices)	-25 – +45 °C

* For each connected amplifier. For details see operating instruction 8018416.

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com