# WI180C-PB

**SICK**
Sensor Intelligence.

# WI180C-PB

## Ordering information

| Type | Part no. |
|------|----------|
| WI180C-PB | 6052566 |

Other models and accessories ➜ www.sick.com/

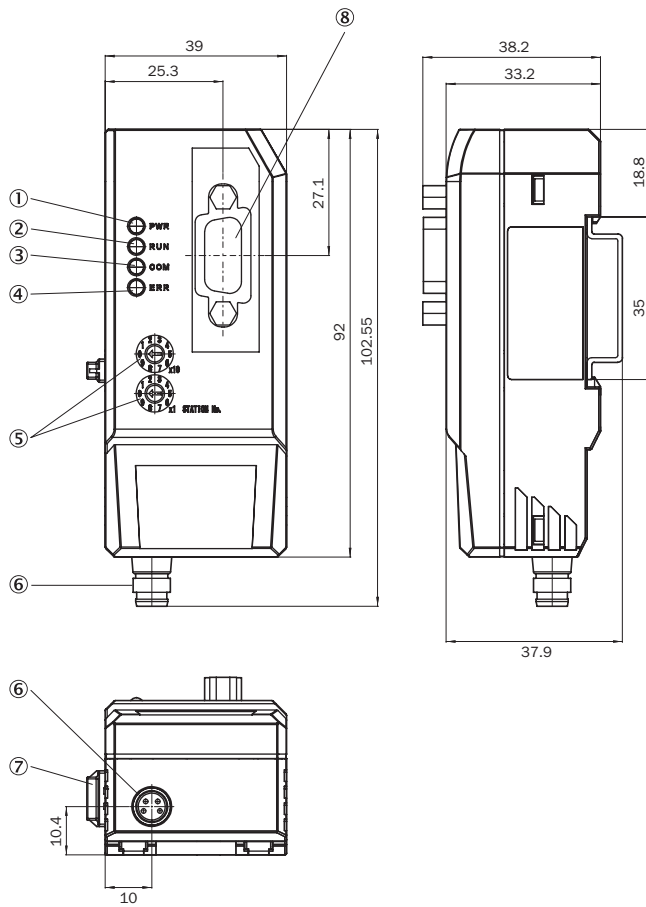## Detailed technical data

### Technical specifications

| | |
|---|---|
| Accessory family | Fieldbus modules |
| Note | PROFIBUS coupler for WLL180T or OD Mini |
| Enclosure rating | IP50 |
| Dimensions (W x H x L) | 39 mm x 38.2 mm x 102.55 mm |
| 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 |

### Classifications

| | |
|---|---|
| eCl@ss 5.0 | 27242202 |
| eCl@ss 5.1.4 | 27242602 |
| eCl@ss 6.0 | 27242602 |
| eCl@ss 6.2 | 27242602 |
| eCl@ss 7.0 | 27242602 |
| eCl@ss 8.0 | 27242602 |
| eCl@ss 8.1 | 27242602 |
| eCl@ss 9.0 | 27242602 |
| eCl@ss 10.0 | 27242602 |
| eCl@ss 11.0 | 27242602 |
| eCl@ss 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

## Connection type

### 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<br>1.000 m @ 187.5 kbit/s<br>400 m @ 500 kbit/s<br>200 m @ 1.500 kbit/s<br>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<br>D-sub, 9-pin, PROFIBUS<br>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**

SICK AG  |  Waldkirch  |  Germany  |  www.sick.com

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