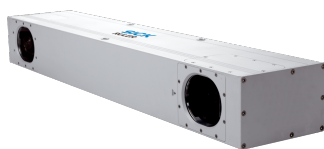


# PLB500

PLB

ROBOT GUIDANCE SYSTEMS

**SICK**  
Sensor Intelligence.



## Ordering information

| Type   | part no. |
|--------|----------|
| PLB500 | 1058009  |

Other models and accessories → [www.sick.com/PLB](http://www.sick.com/PLB)

## Detailed technical data

### Features

|   |  |
|---|--|
| <b>Field of view</b>                      | Large  |
| <b>Tasks</b>                              | Position determination   |
| <b>Applications</b>                       | Robot guidance   |
| <b>Camera type</b>                        | 3D snapshot  |
| <b>Example volume of view (L x W x H)</b> | 800 mm x 1,200 mm x 1,000 mm (max. height range)<br>1,000 mm x 1,200 mm x 750 mm (max. image area) |
| <b>Image resolution</b>                   | 1 mm ... 4 mm, depending on the distance to the camera   |
| <b>Light source</b>                       | Laser, red, 660 nm, ± 15 nm  |
| <b>Laser class</b>                        | 2  |
| <b>3D CAD format</b>                      | IGES, STEP   |
| <b>Technology</b>                         | 3D snapshot, image analysis  |

### Mechanics/electronics

|                               |                          |
|-------------------------------|--------------------------|
| <b>Supply voltage</b>         | 24 V DC, <sup>1)</sup>   |
| <b>Current consumption</b>    | 1 A                      |
| <b>Dimensions (L x W x H)</b> | 820 mm x 107 mm x 145 mm |
| <b>Weight</b>                 | 13.5 kg                  |
| <b>Enclosure rating</b>       | IP65                     |

<sup>1)</sup> ± 15 %.

### Performance

|                               |                                   |
|-------------------------------|-----------------------------------|
| <b>Part localization time</b> | 5 s ... 10 s, typical             |
| <b>Part size</b>              | (approx.) > 75 mm x 75 mm x 75 mm |
| <b>Part characteristics</b>   | Simple and complex part shapes    |

### Interfaces

|                        |  |
|------------------------|--|
| <b>Ethernet</b>        |  |
| Data transmission rate | 1 Gbit/s (camera), 10/100 Mbit/s (robot) |
| Protocol               | TCP/IP (camera)                          |
| Electrical connection  | RJ45                                     |

### Ambient data

|                                       |                                 |
|---------------------------------------|---------------------------------|
| <b>Ambient temperature, operation</b> | 0 °C ... +40 °C, Non-condensing |
|---------------------------------------|---------------------------------|

<sup>1)</sup> Not during scanning.

|                       |                                      |
|-----------------------|--------------------------------------|
| <b>Shock load</b>     | 15 g, 3 x 6 directions <sup>1)</sup> |
| <b>Vibration load</b> | 5 g (58 Hz ... 150 Hz)               |

<sup>1)</sup> Not during scanning.

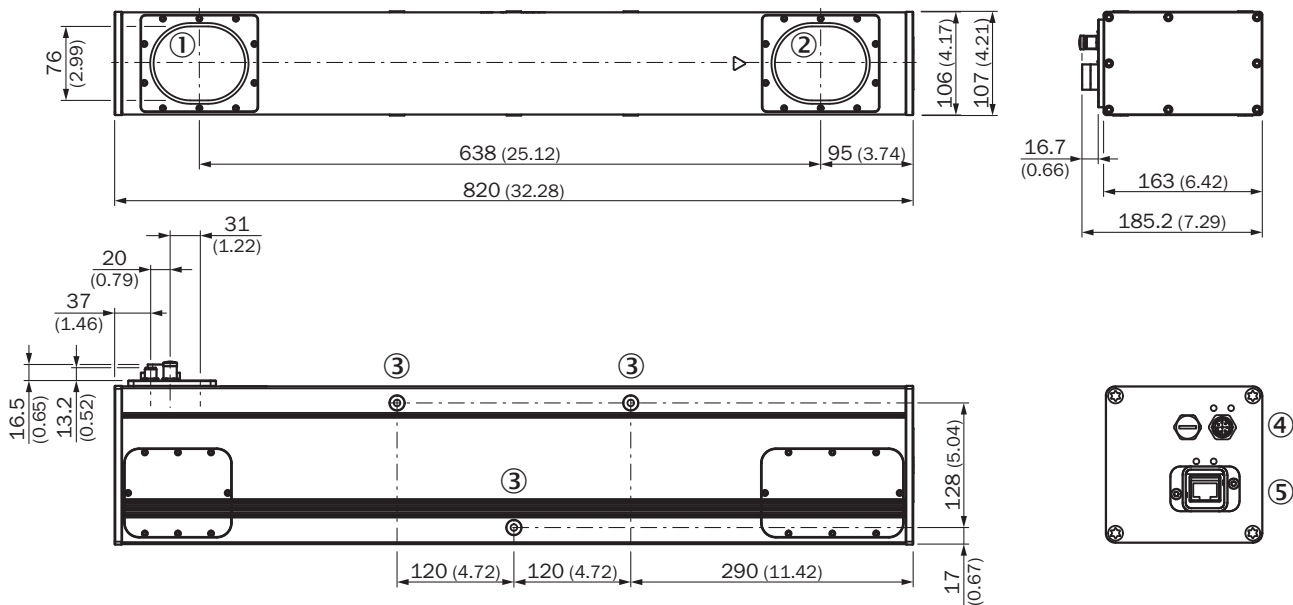
### General notes

|                           |   |
|---------------------------|---|
| <b>Items supplied</b>     | Scanning Ruler camera<br>PLB Application Software |
| <b>Factory calibrated</b> | ✓   |

### Classifications

|                     |          |
|---------------------|----------|
| <b>ECLASS 5.0</b>   | 27381501 |
| <b>ECLASS 5.1.4</b> | 27381501 |
| <b>ECLASS 6.0</b>   | 27381590 |
| <b>ECLASS 6.2</b>   | 27381590 |
| <b>ECLASS 7.0</b>   | 27381590 |
| <b>ECLASS 8.0</b>   | 27381590 |
| <b>ECLASS 8.1</b>   | 27381590 |
| <b>ECLASS 9.0</b>   | 27381590 |
| <b>ECLASS 10.0</b>  | 27381590 |
| <b>ECLASS 11.0</b>  | 27381591 |
| <b>ECLASS 12.0</b>  | 27381591 |

### Dimensional drawing







Dimensions in mm (inch)

- ① Image sensor
- ② Laser unit and rotating mirror
- ③ Fastening threads (M8 x 15 mm)
- ④ Power I/O: M12, 8-pin
- ⑤

⑤ gigabit Ethernet

## Recommended accessories

Other models and accessories → [www.sick.com/PLB](http://www.sick.com/PLB)

|   | Brief description   | Type                          | part no. |
|---|---|-------------------------------|----------|
| connectors and cables   |   |                               |          |
|    | <ul style="list-style-type: none"> <li>• <b>Connection type head A:</b> Male connector, RJ45, 8-pin, straight</li> <li>• <b>Connection type head B:</b> Male connector, RJ45, 8-pin, straight</li> <li>• <b>Signal type:</b> Ethernet, Gigabit Ethernet</li> <li>• <b>Cable:</b> 10 m, PVC</li> <li>• <b>Description:</b> Ethernet, Push-pull male connector, unshielded, Gigabit Ethernet</li> </ul> | SSL-0J08-G10ME                | 6032322  |
|    | <ul style="list-style-type: none"> <li>• <b>Description:</b> Shielded</li> <li>• <b>Connection type head A:</b> Female connector, M12, 8-pin, straight</li> <li>• <b>Connection type head B:</b> Flying leads</li> <li>• <b>Cable:</b> 10 m, 8-wire, PVC</li> <li>• <b>Connection systems:</b> Flying leads</li> <li>• <b>Application:</b> Zones with chemicals</li> </ul>                            | DOL-1208-G10MA                | 6022152  |
| Commissioning aids and test equipment   |   |                               |          |
|    | <ul style="list-style-type: none"> <li>• <b>Product:</b> Configuration devices</li> <li>• <b>Dimensions (W x H x L):</b> 240 mm<br/>82 mm<br/>267 mm, 9.45 "<br/>3.23 "<br/>10.51 "</li> <li>• <b>Operating system:</b> 1 x Windows 10 IoT Enterprise 2021 LTSC Value (Celeron/i3/i5) - 64 Bit</li> </ul>   | PC, PLB K803<br>ROBOTIC PRIME | 1148223  |
| Power supply units and power supply cables  |   |                               |          |
|  | <ul style="list-style-type: none"> <li>• <b>Input voltage:</b> ≤ 230 V AC</li> <li>• <b>Output voltage:</b> 24 V DC</li> <li>• <b>Output current:</b> 10 A</li> <li>• <b>Description:</b> Power supply unit</li> </ul>  | Power supply unit             | 6032863  |

## 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](http://www.sick.com)