

SICK.COM



DATA SHEET

PLB-5140700

PLB
Robot guidance systems

SICK Sensor Intelligence

ROBOT GUIDANCE SYSTEMS

PLB-5140700

ORDERING INFORMATION

Type	part no.
PLB-5140700	1109367

Further device versions and accessories at www.sick.com/PLB



DETAILED TECHNICAL DATA

FEATURES

Product version	PLB-520 5MP
Field of view	Large
Classification	Secondary camera
Tasks	Position determination
Applications	Robot guidance
Camera type	3D snapshot
Example volume of view (L x W x H)	1,300 mm x 1,200 mm x 1,000 mm
Image resolution	0.4 mm ... 1 mm, depending on the distance to the camera
Light source	LED, blue, 465 nm
LED class	Risk group 1
3D CAD format	IGES, STEP
Technology	3D snapshot, image analysis

MECHANICS/ELECTRONICS

Connection type	Male connector M12, 5-pin, L-coded
Supply voltage	24 V DC, ± 15 %
Current consumption	5 A
Dimensions (L x W x H)	488 mm x 200 mm x 80 mm
Weight	2,500 g
Enclosure rating	IP54

PERFORMANCE

Part localization time	3 s ... 10 s, typical
Part size	(approx.) > 30 mm x 30 mm x 30 mm
Part characteristics	Simple and complex part shapes

INTERFACES

Ethernet	Data transmission rate	1 Gbit/s (camera), 10/100 Mbit/s (robot)
	Protocol	TCP/IP (camera)
	Electrical connection	M12 female connector, 8-pin, X-coded

AMBIENT DATA

Ambient temperature, operation	0 °C ... +40 °C, Non-condensing
Shock load	80 g/1,9 ms, 25 g / 6 ms ¹⁾
Vibration load	30-500 Hz / 10 g ²⁾

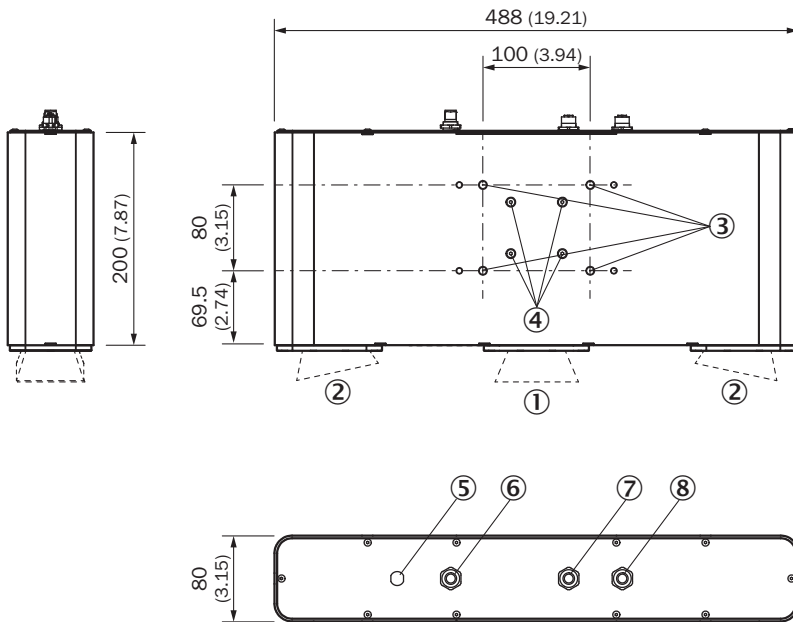
¹⁾ IEC 60068-2-27.²⁾ IEC 60068-2-6.**GENERAL NOTES**

Items supplied	X36 camera PLB Application Software
Factory calibrated	✓

CERTIFICATES

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

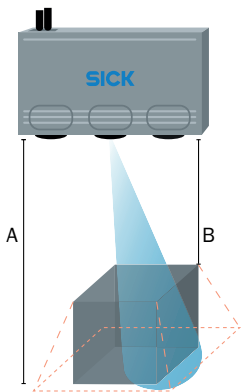
DIMENSIONAL DRAWING



Dimensions in mm (inch)

- ① LED projection module
- ② Image sensor
- ③ Fastening threads (M8 x 6 mm)
- ④ M8 x 1.25 mm
- ⑤ Fuse 5x20 (3,15 A / 250 V)
- ⑥ Power connector
- ⑦ Gigabit Ethernet, Camera 1
- ⑧ Gigabit Ethernet, Camera 2

DETECTION VOLUME AND FIELD OF VIEW



Parameter	PLB-520 5MP small	PLB-520 5MP medium	PLB-520 5MP large
Image resolution	0.1 mm ... 0.2 mm, depending on the distance to the camera	0.2 mm ... 0.4 mm, depending on the distance to the camera	0.4 mm ... 1.0 mm, depending on the distance to the camera
Part size	(approx.) > 10 mm x 10 mm x 10 mm	(approx.) > 20 mm x 20 mm x 20 mm	(approx.) > 30 mm x 30 mm x 30 mm
Min. distance	800 mm	1400 mm	1500 mm
Max. distance	1200 mm	2200 mm	2500 mm
Field of view at min. distance (L x W)	700 mm x 600 mm	800 mm x 700 mm	1400 mm x 1200 mm
Field of view at max. distance (L x W)	800 mm x 900 mm	1300 mm x 1200 mm	2200 mm x 2000 mm
Example volume of view (L x W x H)	400 mm x 300 mm x 200 mm	800 mm x 600 mm x 400 mm	Euro-pallet: 1200 mm x 8000 mm x 1000 mm

Parameter	PLB-520 5MP small	PLB-520 5MP medium	PLB-520 5MP large
			US-pallet: 1016 mm x 1219 mm x 1000 mm

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1109367



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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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