



LBC611-12AB

Label Checker

2D MACHINE VISION

SICK
Sensor Intelligence.



Ordering information

Sensor	Type	Part no.
CMOS matrix sensor, grayscale values 1.3 Mpixel 1,280 px 960 px	LBC611-12AB	1120347

Illustration may differ

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



Detailed technical data

Features

Technology	2D snapshot
Light source	<ul style="list-style-type: none"> Internal lighting LED, visible amber light, 617 nm, ± 50 nm Internal lighting LED, visible blue light, 470 nm, ± 15 nm Feedback spot LED, visible green light, 525 nm, ± 15 nm Adjustment aid Laser, visible red light, 630 nm, ± 15 nm
Laser class	1, complies with 21 CFR 1040.10 except for the conformance according to "Laser Notice No. 56" from May 8, 2019 (IEC 60825-1:2014, EN 60825-1:2014)
Focus	Adjustable focus (manually)
Sensor	CMOS matrix sensor, grayscale values, 1.3 Mpixel, 1,280 px, 960 px
Spectral range	Approx. 400 nm ... 900 nm
Focal length	12 mm

Mechanics/electronics

Dimensions, system (L x W x H)	50 mm x 40.3 mm x 29.6 mm
Enclosure rating	IP54 (EN 60529, EN 60529/A2)
Protection class	III
Power consumption	Typ. 3.5 W
Housing material	Aluminum die cast
Output current	≤ 100 mA
Connections	1 x M12, 17-pin male connector (serial, I/Os, voltage supply) 1 x M12, 4-pin female connector (Ethernet)
Supply voltage	12 V DC ... 24 V DC, ± 15 %
Window material	PMMA
Weight	165 g

Performance

Bar code types	2/5 Industrial Interleaved 2 of 5
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	Codabar Code 39 Code 93 Code 128 EAN-8 EAN13 Pharmacode
2D code types	Data Matrix ECC200 QR code Micro QR code PDF417 Aztec
OCR/OCV fonts	Universal, industrial, document, DotPrint, pharma, OCR-A, OCR-B, Arabic numbers
Optical format	1/3"
Maximum encoder frequency	300 Hz

Interfaces

Ethernet	✓, TCP/IP
Function	EtherNet/IP UDP PROFINET
Data transmission rate	10/100 MBit/s
Protocol	FTP HTTP
Serial (RS-232)	✓
Data transmission rate	(300 Baud ... 115.2 kBaud)
Operator interface	Web server
Optical indicators	6 x status display, 2 x LED alignment aids, 1 x feedback spot

Ambient data

Ambient temperature, operation	-20 °C ... +70 °C, permissible relative humidity: 0% ... 90% (non-condensing)
Ambient temperature, storage	-20 °C ... +70 °C ¹⁾
Shock load	EN 60068-2-27:2009-05
Vibration load	EN 60068-2-6:2008-02

¹⁾ Permissible relative humidity: 0% ... 90% (non-condensing).

General notes

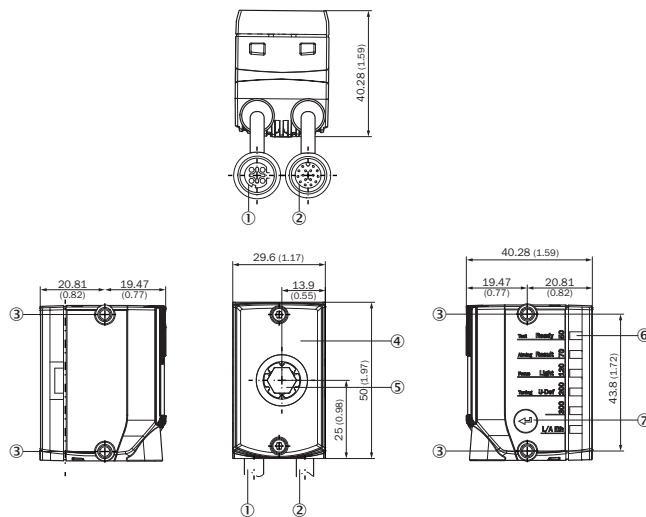
Items supplied	InspectorP V2D611P-MMSCE4 LabelChecker software
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Classifications

ECLASS 5.0	27310205
ECLASS 5.1.4	27310205
ECLASS 6.0	27310205
ECLASS 6.2	27310205
ECLASS 7.0	27310205
ECLASS 8.0	27310205
ECLASS 8.1	27310205
ECLASS 9.0	27310205
ECLASS 10.0	27289090

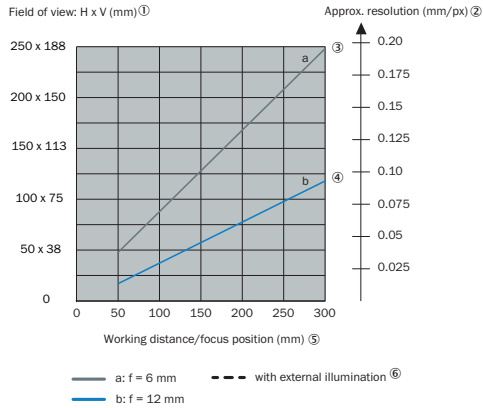
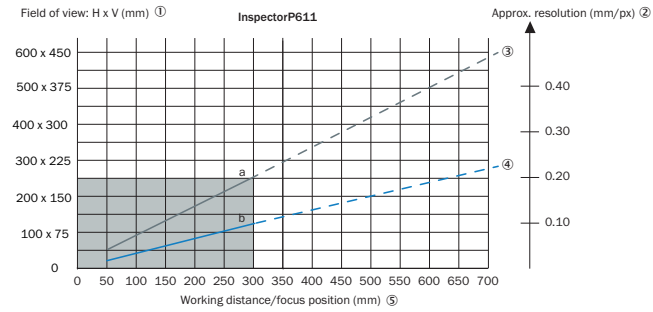
ECLASS 11.0	27289090
ECLASS 12.0	27289090
ETIM 5.0	EC001820
ETIM 6.0	EC001820
ETIM 7.0	EC001820
ETIM 8.0	EC001820
UNSPSC 16.0901	43211731

Dimensional drawing (Dimensions in mm (inch))



- ① Connecting cable with “Ethernet” connection (female connector, M12, 4-pin, D-coded), length of cable: 0.25 m
- ② Connecting cable with “Power/Serial Data/CAN/I/O” connection (male connector, M12, 17-pin, A-coded), length of cable: 0.35 m
- ③ 4 x M4 blind tapped holes, 6.4 mm deep for mounting the device
- ④ Viewing window with 8 integrated illumination LEDs, 2 LED alignment aids, 1 feedback LED, 1 time-of-flight sensor
- ⑤ Optics, manual focus adjustment with the help of a focus adjustment tool
- ⑥ 6 status LEDs to display the focus position and working distance, device status and device function (3 display levels)
- ⑦ Function key

Characteristic curve





Take into account the following aspects when designing the application: the field of view geometry of the device, and the position of the field of view in the space in front of the device. Possible angles at which the objects can arise in relation to the device. For the planned working distance: resultant field of view length and width as well as the approximate resolution.

- ① Field of view: Horizontal x vertical in mm
- ② Approximate resolution in mm/px
- ③ F = 6 mm. Solid line with internal lighting, and dashed line with appropriate external illumination accessories.
- ④ F = 12 mm. Solid line with internal lighting, and dashed line with appropriate external illumination accessories.
- ⑤ Working distance/Focus position in mm
- ⑥ With external illumination

Recommended accessories

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

	Brief description	Type	Part no.
Others			
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M12, 4-pin, straight, D-coded • Connection type head B: Male connector, RJ45, 4-pin, straight • Signal type: Ethernet, PROFINET • Cable: 2 m, 4-wire, PUR, halogen-free • Description: Ethernet, PROFINET, shielded • Application: Drag chain operation, Zones with oils and lubricants 	YM2D24-020PN1MRJA4	2106182
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M12, 17-pin, straight, A-coded • Connection type head B: Male connector, M12, 17-pin, straight, A-coded • Signal type: Power, serial, CAN, digital I/Os • Cable: 3 m, 17-wire • Description: Power, serial, CAN, digital I/Os, suitable for 2 A, shielded, to connection module CDB650 • Application: Drag chain operation 	YM2A8D-030XXXF2A8D	6051194

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:

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