



# ICD890-3200100

ICD8xx

**IMAGE-BASED CODE READERS**

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
ICD890-3200100	1061166

Other models and accessories → [www.sick.com/ICD8xx](http://www.sick.com/ICD8xx)



### Detailed technical data

#### Features

<b>Optical focus</b>	Dynamic focus control
<b>Sensor</b>	Dual-line CMOS sensor
<b>Sensor resolution</b>	8,192 px (200 dpi, with 2.5 m/s conveyor speed)
<b>Line frequency</b>	Max. 19 kHz
<b>Lens</b>	Integrated
<b>Focal length</b>	135 mm
<b>Reading distance</b>	1,400 mm ... 3,000 mm <sup>1)</sup>
<b>Field of view</b>	1,175 mm (170 dpi)
<b>Depth of field</b>	1,600 mm (170 dpi)

<sup>1)</sup> At 0,3 mm code resolution.

#### Mechanics/electronics

<b>Connection type</b>	7 x M12 2 x RJ45
<b>Power consumption</b>	Typ. 75 W
<b>Battery</b>	Type: TL-2450 cell (1/10C cell), soldered, non-rechargeable Chemical system: Lithium thionyl chloride (Li-SOCl <sub>2</sub> ) Lithium quantity: 0.2 g
<b>Housing</b>	Aluminum die cast Aluminum extruded profile
<b>Housing color</b>	Light blue (RAL 5012)
<b>Enclosure rating</b>	IP64 (DIN 40 050)
<b>Protection class</b>	III (IEC 1010-1)
<b>Weight</b>	13.5 kg
<b>Dimensions (L x W x H)</b>	496 mm x 208 mm x 214 mm
<b>MTBF</b>	80,000 h
<b>MTTR</b>	< 10 min

#### Performance

<b>Readable code structures</b>	1D codes, 2D codes, Stacked, plain text
<b>Bar code types</b>	Interleaved 2 of 5, Codabar, Code 128, Code 39, EAN/UPC with add-on, GS1-128 / EAN 128, postal codes

<b>2D code types</b>	Data Matrix ECC200, MaxiCode, QR code, PDF417, others on request
<b>OCR/OCV fonts</b>	On request
<b>Print ratio</b>	2:1 ... 3:1
<b>Transport speed</b>	4.8 m/s (100 lpi)
<b>Minimum object distance</b>	≥ 50 mm
<b>Number of objects per second</b>	≤ 10
<b>Image type</b>	JPEG, TIFF

## Interfaces

<b>Serial</b>	✓, RS-232
Function	Service interface
Data transmission rate	≤ 56,700 Baud
<b>Ethernet</b>	✓ (3), TCP/IP
Function	Service interface, FTP, real-time image output
Data transmission rate	1x 10/100 Mbit/s, 2x Gbit/s
<b>CAN bus</b>	✓ (2)
Function	SICK CAN sensor network
Data transmission rate	10 kbit/s ... 1 Mbit/s
<b>PROFIBUS DP</b>	✓
Remark	Via MSC800 controller
<b>Optical indicators</b>	5 LED (status displays)
<b>Memory card</b>	SD-Card, 1 GB

## Ambient data

<b>Vibration resistance</b>	IEC 68-2-6
<b>Shock resistance</b>	IEC 68-2-27 IEC 68-2-32
<b>Ambient operating temperature</b>	0 °C ... +50 °C
<b>Storage temperature</b>	-20 °C ... +70 °C
<b>Permissible relative humidity</b>	95 %, Non-condensing
<b>Ambient light immunity</b>	2,000 lx, on code
<b>Bar code print contrast (PCS)</b>	≤ 40 %

## Classifications

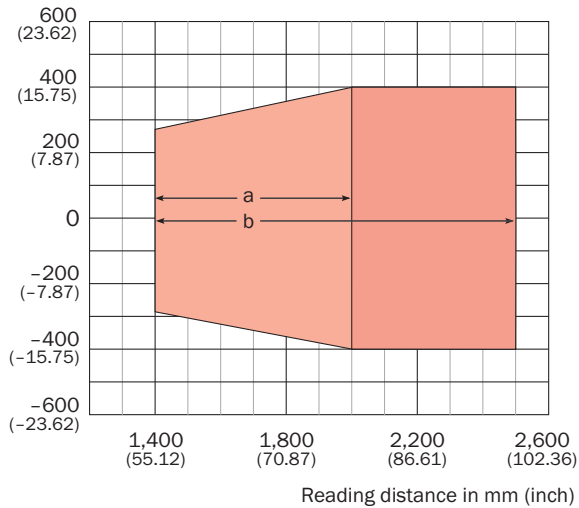
<b>ECLASS 5.0</b>	27280103
<b>ECLASS 5.1.4</b>	27280103
<b>ECLASS 6.0</b>	27280103
<b>ECLASS 6.2</b>	27280103
<b>ECLASS 7.0</b>	27280103
<b>ECLASS 8.0</b>	27280103
<b>ECLASS 8.1</b>	27280103
<b>ECLASS 9.0</b>	27280103
<b>ECLASS 10.0</b>	27280103
<b>ECLASS 11.0</b>	27280103

<b>ECLASS 12.0</b>	27280103
<b>ETIM 5.0</b>	EC002550
<b>ETIM 6.0</b>	EC002550
<b>ETIM 7.0</b>	EC002999
<b>ETIM 8.0</b>	EC002999
<b>UNSPSC 16.0901</b>	43211701

### Reading field diagram

Camera type ICD890 with illumination type ICI890 (900 mm)

Reading field height in mm (inch)

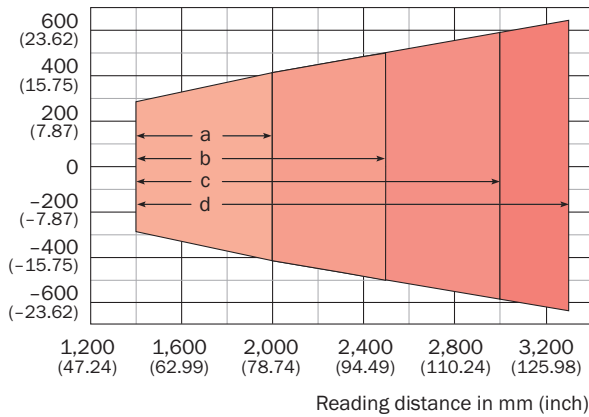


**Resolution**

- a: 0.15 mm (5.9 mil), 250 dpi
- b: 0.20 mm (7.9 mil), 200 dpi

Camera type ICD890 with illumination type ICI890 (1100 mm)

Reading field height in mm (inch)



**Resolution**

- a: 0.15 mm (5.9 mil), 250 dpi
- b: 0.20 mm (7.9 mil), 200 dpi
- c: 0.25 mm (9.8 mil),  $\geq 170$  dpi
- d: 0.30 mm (11.8 mil),  $\geq 150$  dpi

**Recommended services**

Additional services → [www.sick.com/ICD8xx](http://www.sick.com/ICD8xx)

	Type	Part no.
<b>Extended warranty</b>		
<ul style="list-style-type: none"> <li>• <b>Product area:</b> Identification solutions, machine vision, Detection and ranging solutions, safety camera sensors, Safety laser scanners, Safety radar sensors</li> <li>• <b>Range of services:</b> The services correspond to the scope of the statutory manufacturer warranty (SICK general terms of delivery).</li> <li>• <b>Duration:</b> Five-year warranty from delivery date.</li> </ul>	Extended warranty for a total of five years from delivery date	1680671
<b>Service agreements</b>		
<ul style="list-style-type: none"> <li>• <b>Product area:</b> Robot guidance systems, Track and trace systems, Driver assistance systems, Object detection systems, Profiling systems, Gateway systems, Quality control systems</li> <li>• <b>Range of services:</b> Maintenance, Troubleshooting, extended warranty, 8/5 remote support, 8/5 help desk</li> <li>• <b>Duration:</b> Duration is arranged individually with the customer and defined in the contract</li> </ul>	Bronze service agreements for Systems	1616164

## 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)