ONLINE DATA SHEET
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Image-based code readers
ICR84x-2 FlexLens / ICR845-2L FlexLens / FlexLens

ICR845-2L0020S01 FlexLens

SICK
Sensor Intelligence.

Image-based code readers
ICR84x-2 FlexLens / ICR845-2L FlexLens / FlexLens

Model Name > ICR845-2L0020S01 FlexLens
Part No. > 1047956

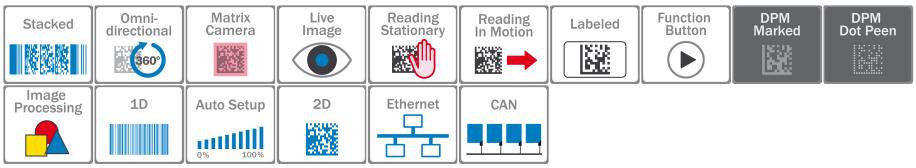
Illustration may differ

At a glance

- Configure with live image and auto setup
- Fast, omni-directional reading of printed and direct marked 1D and 2D codes
- Rapid image and data transfer via Ethernet
- Reliable code reading on fast moving objects
- Used with infrared illumination (ICL300-F202S01), which is invisible to the human eye

Your benefits

- Fast, cost-effective commissioning via easy user interface with live image and auto setup configuration
- Omni-directional identification of 1D and 2D codes makes it possible to identify objects that are not aligned
- High-speed, reliable decoding of low contrast and direct part marked codes guarantees secure identification and flexible use
- Different c-mount lens options and illumination types and colors make it ideal for a wide range of solutions
- Dynamic parameter switching makes decoding of different code qualities possible with just one setting
- Low cost image-based code reader which solves many applications with just one device



Features

Version:	FlexLens
Reading field:	Front
Focus:	Variable (per interchangeable lens)
Sensor:	CMOS matrix sensor
Sensor resolution:	752 px x 480 px (WVGA)
Code resolution:	≥0.1 mm [1)]
Reading distance (at code resolution):	0.1 m ... 3 m [2)]
Scanning frequency:	60 Hz, for WVGA resolution
Light source:	External illumination (applicable with infrared illumination ICL300-F202S01)
MTBF:	75,000 h

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[1] [2] Depends on lens used; valid for Data Matrix, PDF417 and 1D codes with good printing quality

Performance

Bar code types:	Interleaved 2 of 5, Codabar, Code 128, Code 39, GS1-128/EAN 128, Pharmacode, UPC/GTIN/EAN
2D code types:	Data Matrix ECC200, GS1 Data-Matrix, QR code
No. of codes per scan:	1 ... 50
No. of codes per reading interval:	1 ... 50
No. of characters per reading interval:	4,000

Interfaces

Serial (RS-232):	✓
Function (Serial (RS-232)):	Host, AUX
Data transmission rate (Serial (RS-232)):	300 Baud ... 57,600 Baud, AUX: 9,600 Baud
Ethernet:	✓
Function (Ethernet):	Host, AUX, image transmission
Data transmission rate (Ethernet):	10/100 Mbit
Protocol (Ethernet):	TCP/IP, FTP (image transmission), PROFINET (optional via external connection module CDM)
CAN bus:	✓
Function (CAN bus):	SICK CAN sensor network (Master/Slave, Multiplexer)
Data transmission rate (CAN bus):	10 kbit/s ... 1 Mbit/s
Protocol (CAN bus):	CANopen, CSN (SICK CAN Sensor Network)
PROFIBUS DP:	✓
Remark (PROFIBUS DP):	Optional via external connection module (CDM + CMF)
DeviceNet:	✓
Remark (DeviceNet):	Optional via external connection module (CDM + CMF)
Acoustic indicators:	Beeper/buzzer (can be switched off, can be assigned a function to signal a result)
Optical indicators:	6 LEDs (status displays)
Switching inputs:	2
Switching outputs:	2 (Result 1 NPN, Result 2 PNP)
Reading pulse:	Non-powered, Switching inputs, Serial interface

Mechanics/electronics

Operating voltage:	15 V DC ... 30 V DC
Power consumption:	8 W
Electrical connection:	1 RJ45 socket on device, cables with 15-pin D-sub HD plug (0.9 m, ± 5 %)
Housing:	Die-cast zinc
Housing color:	Light blue (RAL 5012)
Weight:	900 g, with connecting cable
Dimensions:	123.3 mm x 80 mm x 39 mm
Enclosure rating::	IP 30, IP 65 (EN 60529) [1] [2]
Protection class:	III (EN 61140)
Lens:	C-mount

[1] For installed adapter frame, IP 65 Ethernet cable and IP 65 lens cover or for installed adapter frame, IP 65 cover and IP 65 lens cover [2] Without covered Ethernet connection or with standard Ethernet cable.

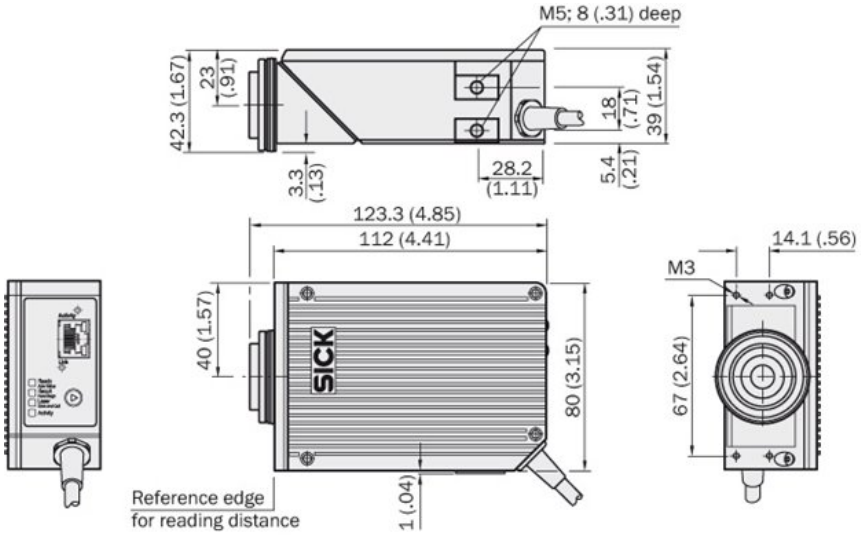
Ambient data

Electromagnetic compatibility (EMC):	EN 61000-6-2/EN 61000-6-4
Vibration resistance:	EN 60068-2-6
Shock resistance:	EN 60068-2-27
Ambient operating temperature:	0 °C ... 40 °C
Storage temperature:	-20 °C ... 70 °C
Permissible relative humidity:	± 90 %, non-condensing
Ambient light safety:	2,000 lx, on bar code

General notes

Items supplied:	Single scanner

Dimensional drawing



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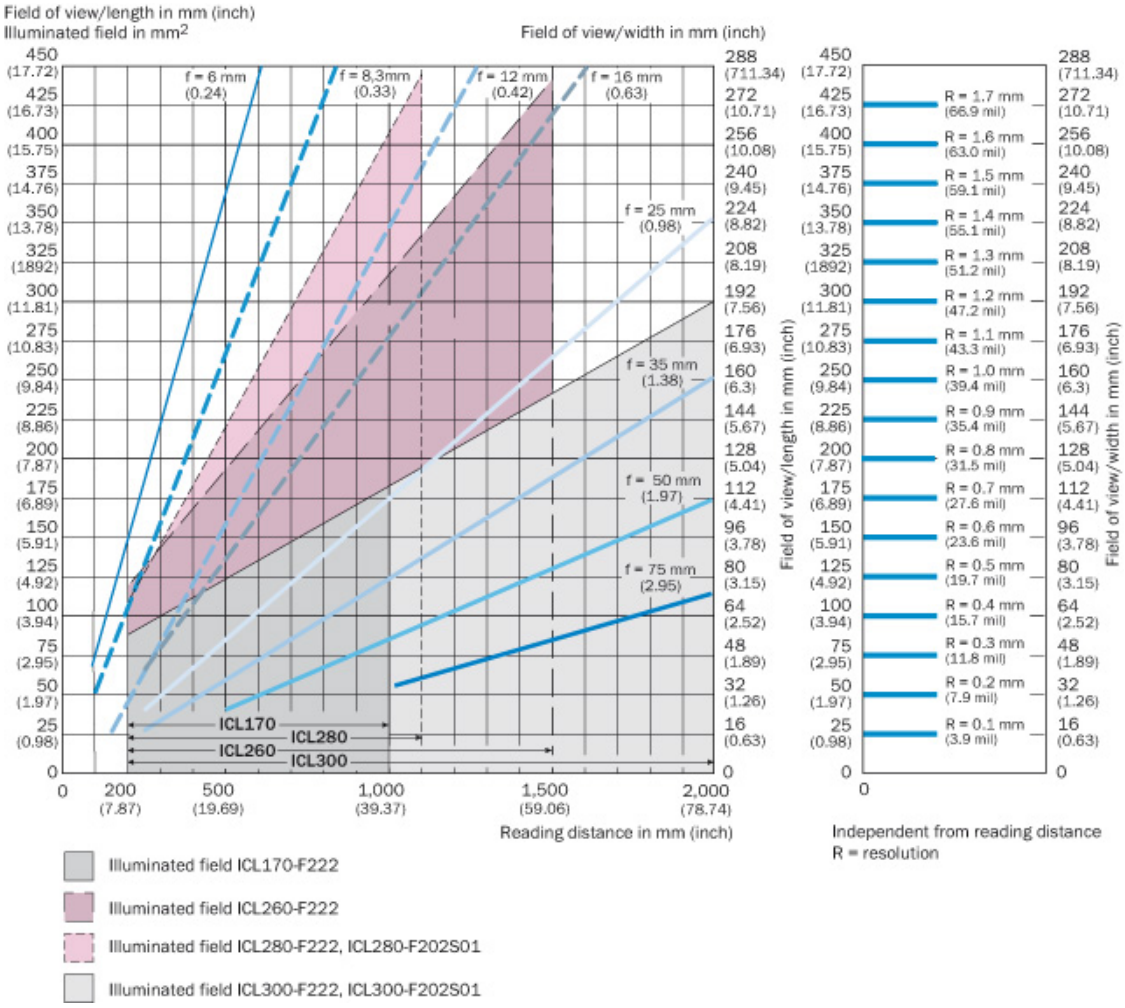
Reading field diagram



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