



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

ICR845-2L0020S01 FlexLens



**Model Name** > [ICR845-2L0020S01 FlexLens](#)  
**Part No.** > [1047956](#)



*Illustration may differ*

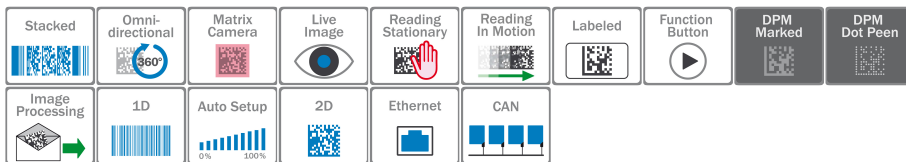
**At a glance**

- 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

**The product has been discontinued. Please contact your SICK sales representative for more information about a replacement product.**



**Features**

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 <sup>1)</sup>
Reading distance::	0.1 m ... 3 m <sup>2) 3)</sup>
Scanning frequency:	60 Hz, for WVGA resolution
Light source:	External illumination (applicable with infrared illumination ICL300-F202S01)
MTBF:	75,000 h

1) 2) Depends on lens used; valid for Data Matrix, PDF417 and 1D codes with good printing quality 3) For details see reading field diagram

## Performance

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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

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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

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Operating voltage:	15 V DC ... 30 V DC
Power consumption:	8 W
Electrical connection:	1 x RJ45 female connector on device, cables with 15-pin D-sub HD male connector (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.

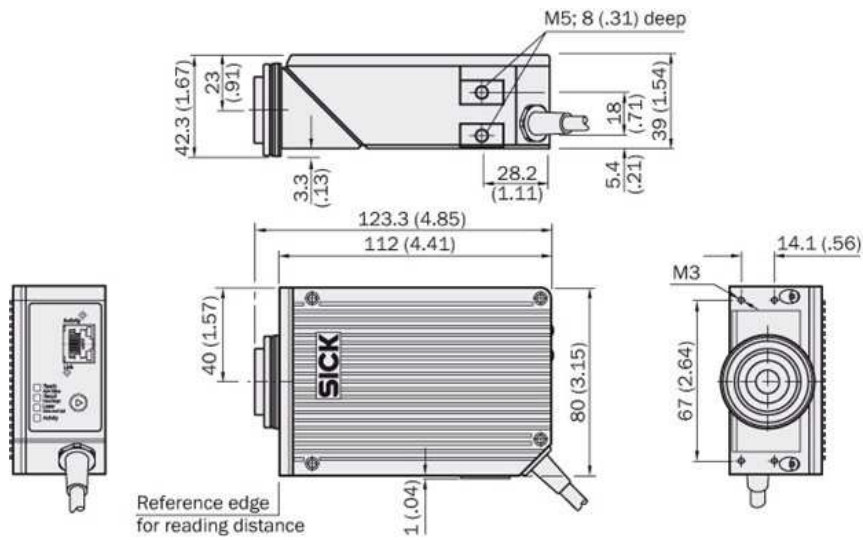
## Ambient data

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 immunity:	2,000 lx, on bar code

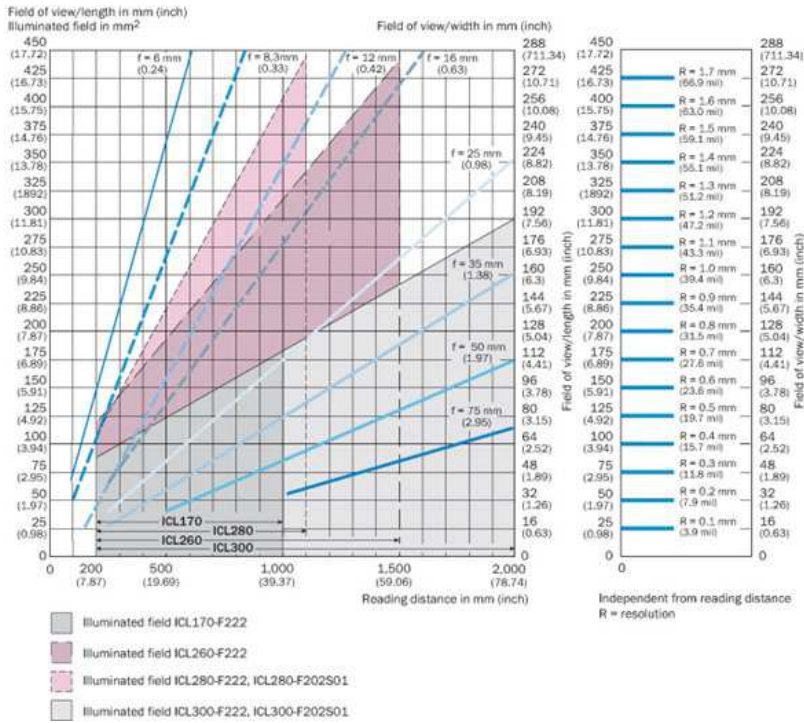
## General notes

Items supplied:	Single scanner
Life cycle phase:	Phased out

## Dimensional drawing



# Reading field diagram



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