



Image-based code readers  
ICR845-2 / ICR845-2C / Mid Range

ICR845-2C0020



**Model Name** > **ICR845-2C0020**  
**Part No.** > **1043740**



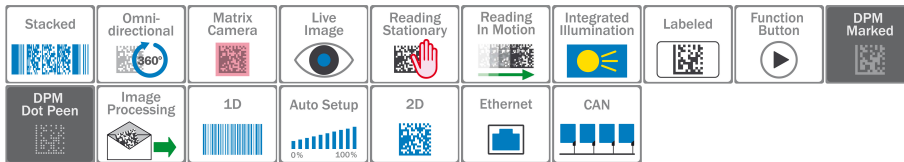
**At a glance**

- 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
- Industrial IP 65 housing for rough environmental conditions (optional IP 65)
- Reliable code reading on stationary and fast moving objects

**Your benefits**

- Robust code identification even at very high transport speeds and speed variances simplify commissioning and increase operational flexibility
- Fast, cost-effective commissioning via easy user interface with live image and auto setup configuration
- High-speed, reliable decoding of low contrast and direct part marked codes guarantees secure identification and flexible use
- Dynamic parameter switching makes decoding different code qualities possible with just one setting
- Omni-directional identification of 1D and 2D codes makes it possible to identify objects that are not aligned
- Industrial IP 65 / IP 67 housing for rough environmental conditions
- Flexible use with integrated, controllable LED illumination

**The product has been discontinued. Please follow the "replacement product" link for information about alternative products.**



**Features**

Version:	Mid Range
Reading field:	Front
Focus:	Fixed focus
Focus position:	115 mm
Sensor:	CMOS matrix sensor
Sensor resolution:	752 px x 480 px (WVGA)
Code resolution:	≥0.15 mm <sup>1)</sup>
Reading distance::	85 mm ... 170 mm <sup>2) 3)</sup>
Scanning frequency:	60 Hz, WVGA resolution
Light source:	Visible red light (lighting LEDs, 617 nm, ± 15 nm)

Laser class: 1 (EN 60825-1)

MTBF: 75,000 h

1) 2) 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: 13 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: 112 mm x 80 mm x 39 mm

Enclosure rating: IP 30, IP 65 (EN 60529) <sup>1) 2)</sup>

Protection class: III (EN 61140)

<sup>1)</sup> For installed adapter frame and IP 65 Ethernet cable or for installed adapter frame and IP 65 cover <sup>2)</sup> Without covered Ethernet connection or with standard Ethernet cable.

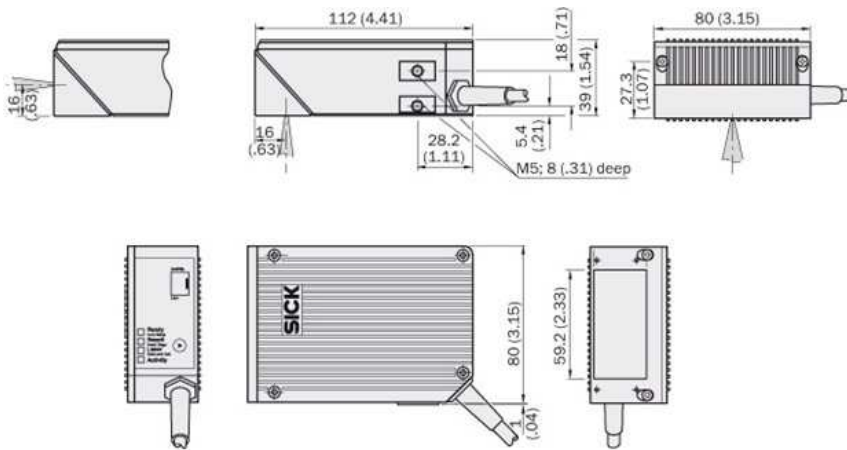
## Ambient data

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

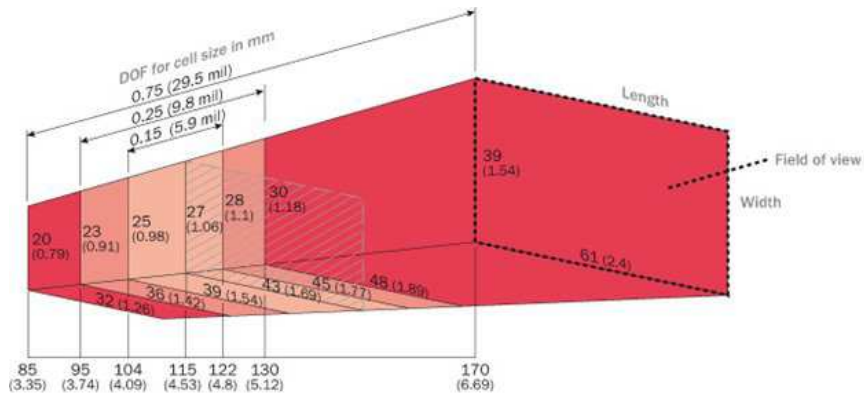
## General notes

Life cycle phase:	Phased out
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## Dimensional drawing



# Reading field diagram



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