



Image-based code readers
ICR840-2 / ICR840-2B / Mid Range

ICR840-2B0020



Model Name > [ICR840-2B0020](#)
Part No. > [1042277](#)



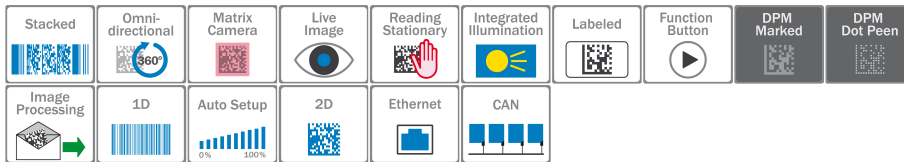
At a glance

- 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 reading of codes on stationary objects

Your benefits

- 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
- A wide variety of resolutions and reading distances provide a solution for any application
- Industrial IP 65 / IP 67 housing for rough environmental conditions
- Flexible use with integrated, controllable LED illumination
- Automated configuration for batch changes

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:	80 mm
Sensor:	CMOS matrix sensor
Sensor resolution:	1,280 px x 1,024 px (1.3 Mpixel
Code resolution:	≥0.1 mm ¹⁾
Reading distance::	50 mm ... 130 mm ^{2) 3)}
Scanning frequency:	25 Hz, at 1.3 megapixels 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

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: 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) ^{1) 2)}

Protection class: III (EN 61140)

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

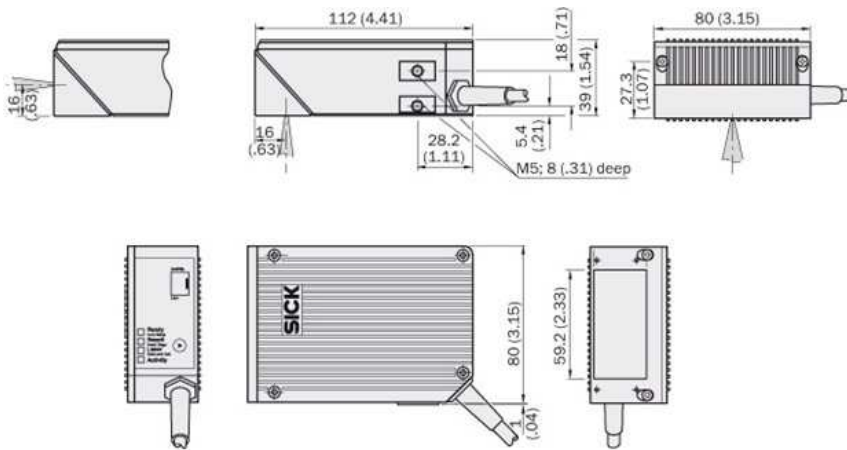
Ambient data

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

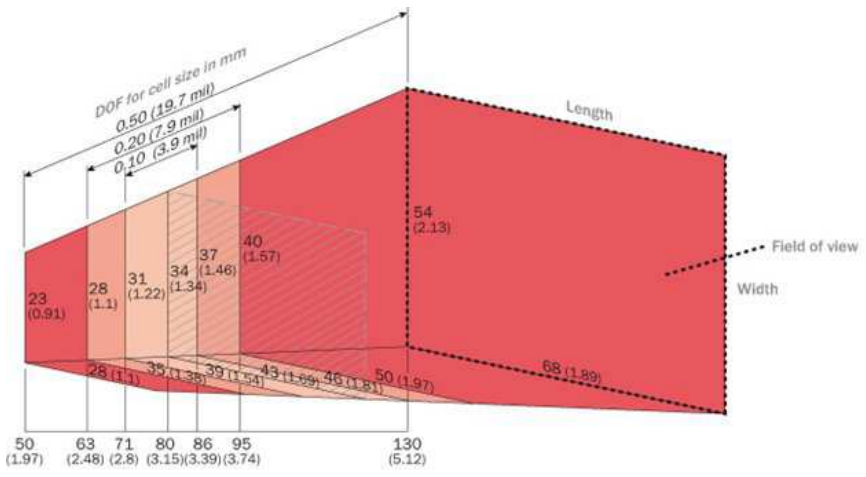
General notes

Life cycle phase:	Phased out
-------------------	------------

Dimensional drawing



Reading field diagram



Australia

Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Česká republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail info@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6881000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederland

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail sick@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com