



Image-based code readers  
ICR85x-2 / ICR852-2A / High Density

ICR852-2A0020



**Model Name** > [ICR852-2A0020](#)  
**Part No.** > [1042899](#)



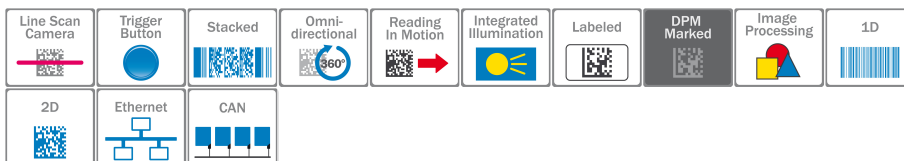
**At a glance**

- Reading high resolution codes at cell sizes/bar width down to 0.1 mm
- Omni-directional identification of up to 50 codes, e.g., circuit board with multiple codes
- Easy trigger handling, codes are identified on-the-fly
- High resolution

**Your benefits**

- Large field of view captures codes in different positions without having to adjust the mounting of the reader
- High-speed, reliable decoding of low contrast, direct part marked codes, even on moving objects
- Reads codes in real-time without stopping the conveyor, increasing throughput
- Industrial IP 65 / IP 67 housing for rough environmental conditions
- Easy configuration via graphical user interface, saves time
- 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

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



**Features**

Version:	High Density
Reading field:	Front
Focus:	Fixed focus
Focus position:	70 mm
Sensor:	CCD line camera
Sensor resolution:	2,048 px
Code resolution:	≥0.1 mm <sup>1)</sup>
Reading distance (at code resolution):	67.5 mm ... 73.5 mm (0.25 mm) <sup>2)</sup>
Reading field (at distance):	40 mm (70 mm)

Scanning frequency:	13 Hz ... 15 kHz
Light source:	Laser diode (visible red light, 650 nm)
Laser class:	2 (EN 60825-1)
MTBF:	20,000 h

1) 2) 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)
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)
PROFINET:	-
DeviceNet:	✓
Remark (DeviceNet):	Optional via external connection module (CDM + CMF)
Acoustic indicators:	Beeper/buzzer (can be switched off, can be assigned functions to signal the result status 0.25 ... 2 mm)
Optical indicators:	4 LEDs (status displays)
Switching inputs:	2 ("Sensor 1", "Sensor 2")
Switching outputs:	2 ("Result 1", "Result 2")
Reading pulse:	Non-powered, Switching inputs, Serial interface

## Mechanics/electronics

Operating voltage:	10 V DC ... 30 V DC
Power consumption:	11 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:	114.6 mm x 80 mm x 39 mm
Enclosure rating::	IP 30, IP 65 (EN 60529) <sup>1) 2)</sup>
Protection class:	III (EN 61140)

1) 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.

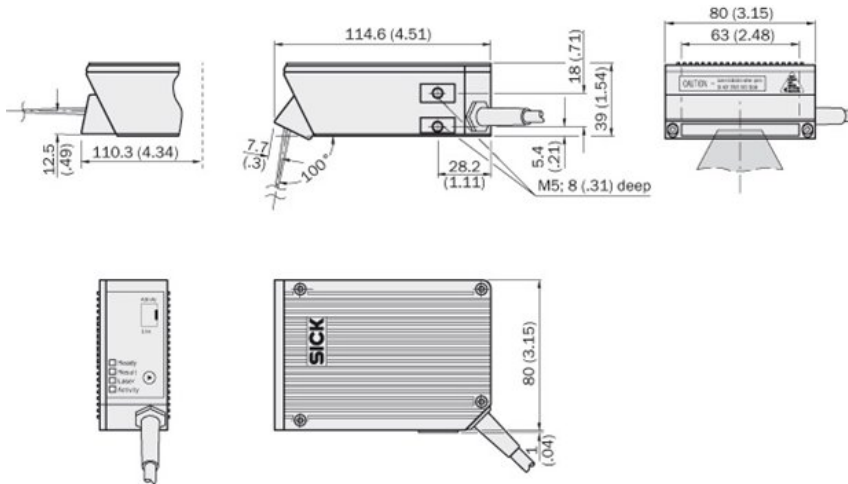
### Ambient data

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 safety:	2,000 lx, on bar code

### General notes

Life cycle phase:	Phased out
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### Dimensional drawing



**Australia**

Phone +61 3 9457 0600  
1800 334 802 – 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 sac@sick.com.br

**Canada**

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

**Ceská 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 kundenservice@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 +972-4-6801000  
E-Mail info@sick-sensors.com

**Italia**

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

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Magyarország**

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

**Nederlands**

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

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@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 admin@sicksgp.com.sg

**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 8865 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](http://www.sick.com)