



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

ICR852-2A1020



Model Name > [ICR852-2A1020](#)
Part No. > [1042900](#)



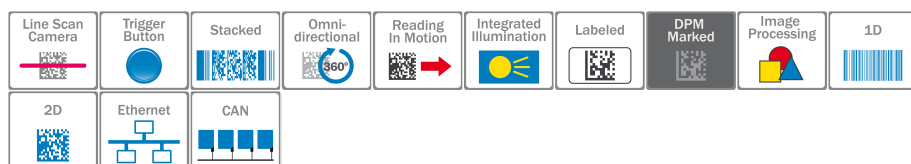
At a glance

- 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:	Side
Focus:	Fixed focus
Focus position:	60 mm
Sensor:	CCD line camera
Sensor resolution:	2,048 px
Code resolution:	≥0.1 mm ¹⁾
Reading distance (at code resolution):	57.5 mm ... 63.5 mm (0.25 mm) ²⁾
Reading field (at distance):	40 mm (60 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) ^{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.

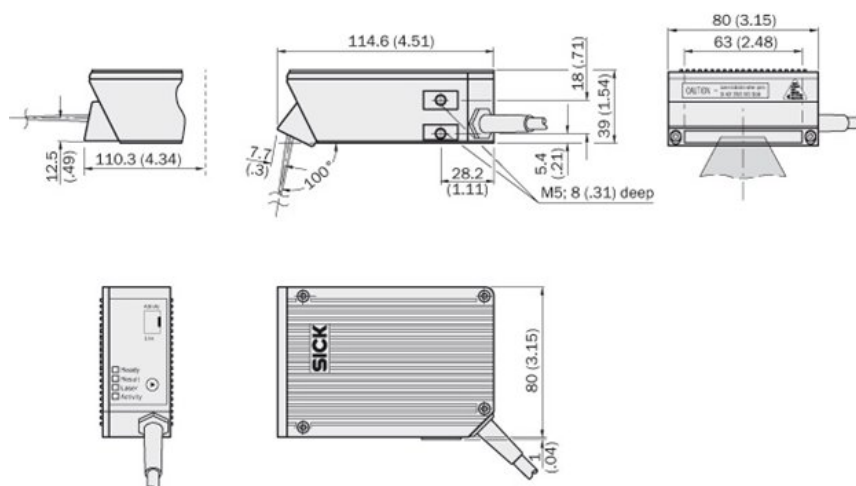
Ambient data

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 safety:	2,000 lx, on bar code

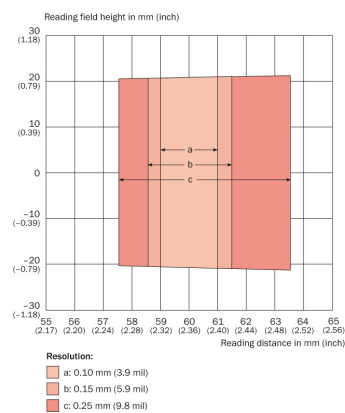
General notes

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

Dimensional drawing



Reading field diagram



Australia

Phone +61 3 9457 0600
1800 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