



Image-based code readers LECTOR®62x / LECTOR®620 ECO

ICR620E-H12013 ECO



Model Name > ICR620E-H12013 ECO
Part No. > 1054507



At a glance

- Decoding of most popular code types: 1D, 2D
- Adjustable focus adaption for quick setup
- Green feedback LED makes successful identification visible
- Auto setup with function buttons - does not require PC
- Compact design and industrial housing
- Analysis tools include live image capturing and read rate view

Your benefits

- Intelligent decoding algorithms provide reliable reading performance for improved read rates and throughput
- Adjustable focus for the use in several applications for reduced spare parts stock level
- Green feedback LED for full visibility of good reads without the need of a PC
- Intuitive setup with function buttons and auto setup reduces training and installation time and costs
- Compact design and flexible interface connections make it easy to install in reduced spaces
- Quick analysis of read rate performance allows for efficient control
- Cloning back-up systems ensure low machine downtime in the event of unexpected incidents
- SICK LifeTime Services give you peace of mind



Features

Reading field:	Side
Focus:	Adjustable focus
Sensor:	CMOS matrix sensor, gray scale values
Sensor resolution:	752 px x 480 px (WVGA)
Focal length:	7 mm
Code resolution:	≥0.1 mm ¹⁾
Reading distance (at code resolution):	40 mm ... 1,500 mm (2.6 mm) ²⁾
Scanning frequency:	25 Hz, WVGA resolution
Internal lighting:	Red
Light source:	Lighting LEDs: visible red light ($\lambda = 617 \pm 15 \text{ nm}$) feedback spot: visible green light ($\lambda = 525 \pm 15 \text{ nm}$)

LED class:	1 (IEC 62471 (2006-07) / EN 62471 (2008-09)), radiance $L_{A,R} < 10 \text{ kW}/(\text{m}^2\text{sr})$ within 100 s, $L_{A,R} < 28/\alpha \text{ kW}/(\text{m}^2\text{sr})$ within 10 s at distance $> 200 \text{ mm}$
MTBF:	75,000 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 32, Code 39, Code 93, GS1 DataBar, GS1-128/EAN 128, Pharmacode, UPC/GTIN/EAN
2D code types:	Data Matrix ECC200, GS1 Data-Matrix, PDF417, PDF417 Truncated, QR code
No. of codes per reading interval:	1 ... 50
No. of characters per reading interval:	500 (for multiplexer function in CAN operation)
Transport speed:	$\leq 2 \text{ m/s}$
Internal image storage:	135 MB

Interfaces

Serial (RS-232, RS-422):	✓
Function (Serial (RS-232, RS-422)):	-
Data transmission rate (Serial (RS-232, RS-422)):	300 Baud ... 115.2 kBaud, AUX: 57.6 kBaud (RS-232)
USB:	✓
Remark (USB):	USB 2.0
Ethernet:	-
Protocol (Ethernet):	PROFINET (optional via external connection module CDM), EtherCAT (optional via external connection module CDF600-2)
CAN bus:	✓
Function (CAN bus):	SICK CAN sensor network (Master/Slave, Multiplexer/Server)
Data transmission rate (CAN bus):	20 kbit/s ... 1 Mbit/s
Protocol (CAN bus):	CANopen, CSN (SICK CAN Sensor Network)
PROFIBUS DP:	✓
Remark (PROFIBUS DP):	Optional via external connection module (CDF)
DeviceNet:	-
Acoustic indicators:	Beeper/buzzer (can be switched off, can be assigned a function to signal a result)
Control elements:	2 buttons (choose and start/stop functions)
Optical indicators:	16 LEDs (5 x status display, 10 x LED bar graph, 1 green feedback spot)
Switching inputs:	4 ("Sensor 1", "Sensor 2", 2 inputs via optional CMC600 in CDB620/CDM420)
Switching outputs:	4 ("Result 1", "Result 2", 2 outputs via optional CMC600 in CDB620/CDM420)
Reading pulse:	Auto pulse, CAN, Non-powered, Presentation mode, Switching inputs, Serial interface

Mechanics/electronics

Operating voltage:	10 V DC ... 30 V DC
Power consumption:	Typ. 3 W
Electrical connection:	1 15-pin D-Sub HD plug (0.9 m)
Housing:	Die-cast aluminum
Housing color:	Light blue (RAL 5012)
Weight:	170 g
Dimensions:	71 mm x 43 mm x 35.6 mm ¹⁾
Enclosure rating:	IP 65 (EN 60529 (1991-10), EN 60529/A2 (2002-02))
Protection class:	III

Lens:

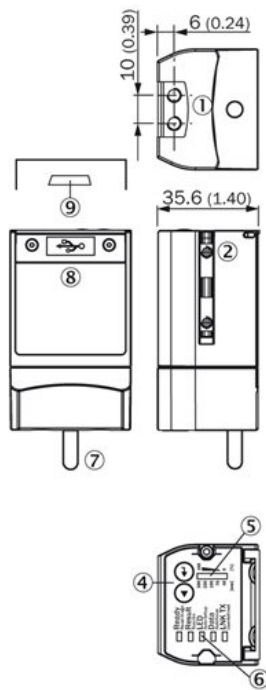
Integrated

¹⁾ Swivel connector is 17.8 mm longer

Ambient data

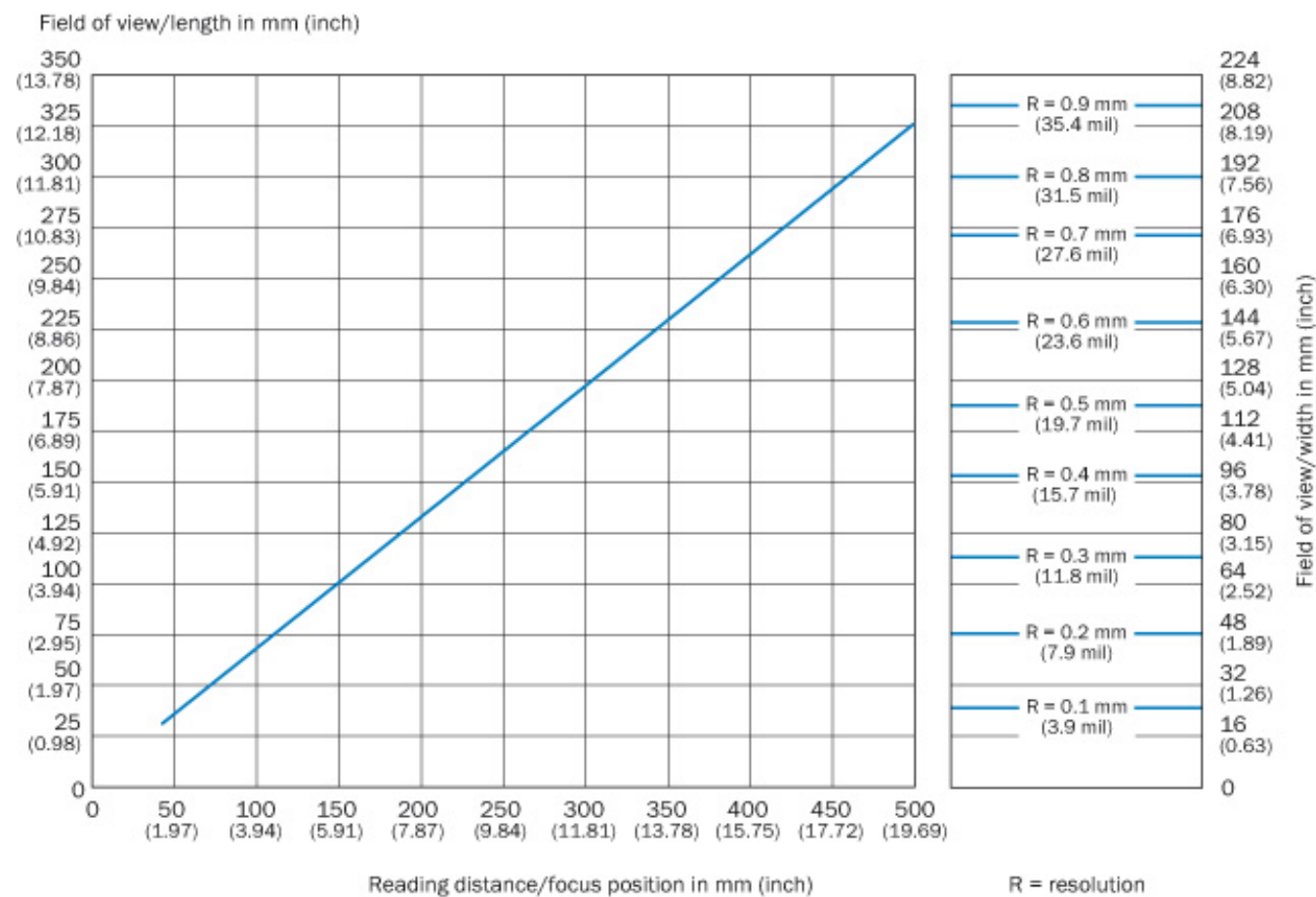
Electromagnetic compatibility (EMC):	EN 61000-6-2 (2006-03)/EN 61000-6-2 (2009-05)
Vibration resistance:	EN 60068-2-6 (2008-02)
Shock resistance:	EN 60068-2-27 (2009-05)
Electrical safety:	EN 60950-1 (2006-04)/EN 60950-1/A11 (2009-03)
Ambient operating temperature:	0 °C ... 50 °C
Storage temperature:	-20 °C ... 70 °C
Permissible relative humidity:	90 %, non-condensing
Ambient light safety:	2,000 lx, on code

Dimensional drawing

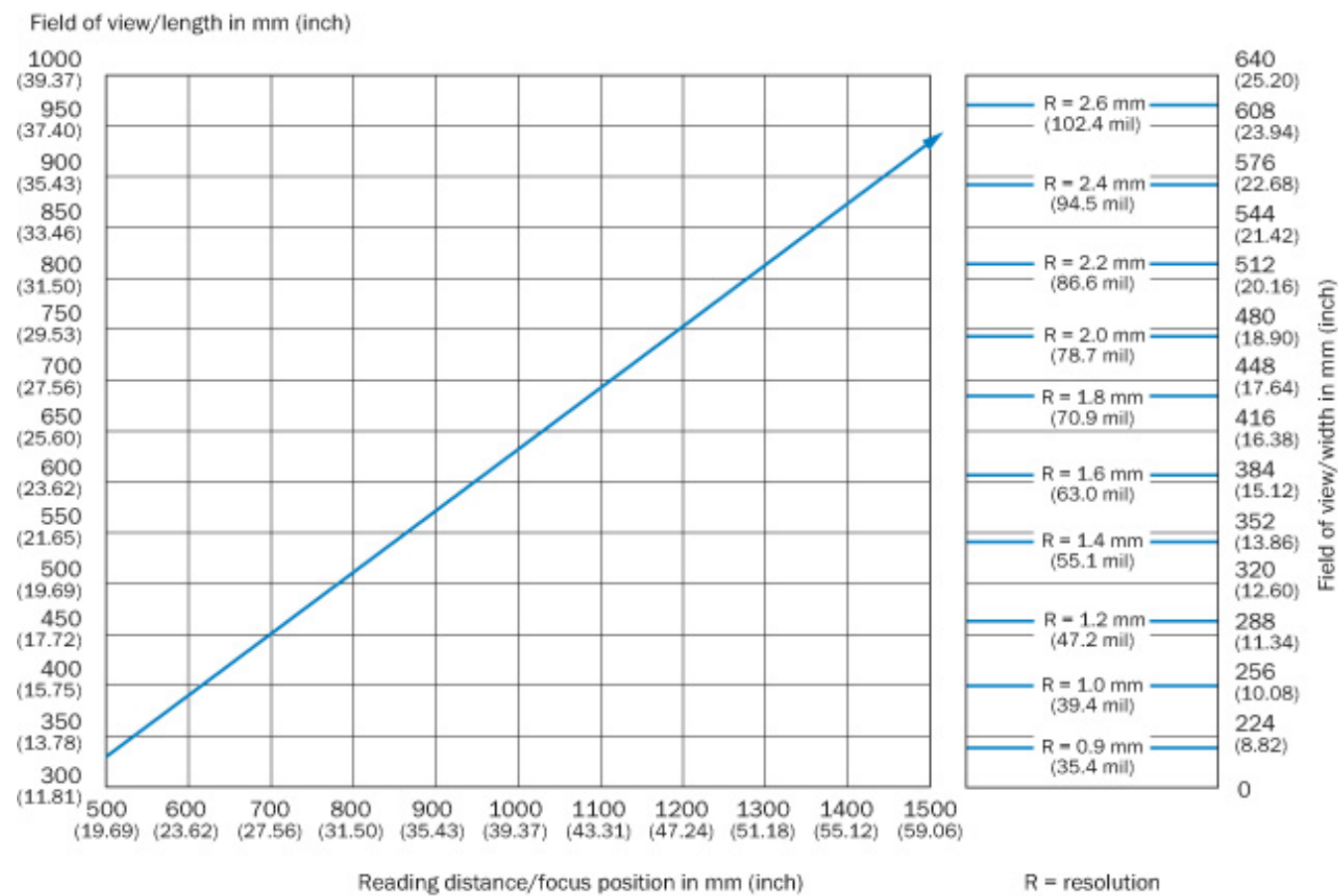


- [1] blind hole thread M5, 5 mm deep (4 x), for mounting
- [2] Sliding nut M5, 5 mm deep (2 x), for mounting (as alternative)
- [3] Reading field
- [4] Function button (2 x)
- [5] Bar graph display
- [6] LED for status display (2 levels), 5 x
- [7] Cable with 15-pin D-sub HD plug
- [8] Cover (flap)
- [9] "Micro USB" connection

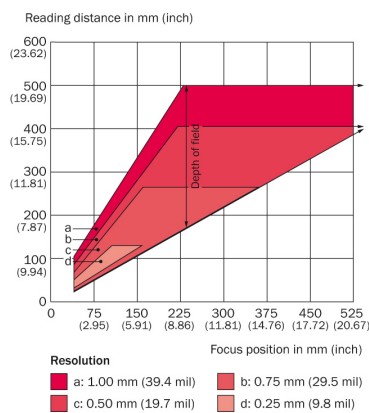
Field of view 1



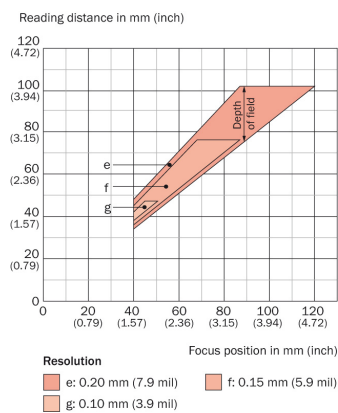
Field of view 2



Depth of field diagram 1



Depth of field diagram 2



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