



Image-based code readers
Lector®62x / Lector®620 DPM Plus

ICR620D-T17503 DPM Plus Solar



Model Name > ICR620D-T17503 DPM Plus Solar
Part No. > 1060912

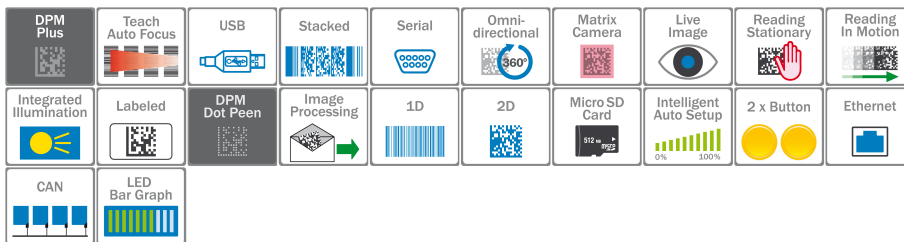


At a glance

- Decoding of all common 1D, 2D, and stacked codes, as well as optical character recognition (depending on type)
- Flexible interfaces: serial interface, USB, and Ethernet
- Function buttons, aiming laser, focus adjustment, auto-setup, and green feedback LED
- Industrial, compact housing with swivel connector
- MicroSD memory card for storing images and backup copies of parameters

Your benefits

- Intelligent decoding algorithms ensure optimal reading performance, good read rates, and high throughput
- 4Dpro facilitates quick and easy integration into many industrial networks
- Intuitive setup with aiming laser, focus adjustment, and auto-setup reduces training and installation time and costs
- Simple mounting thanks to a compact housing and swivel connector, even when space is limited
- Quick and efficient analysis of reading performance and code quality
- Cloning systems create backup copies of parameters, ensuring short machine downtimes in the event of malfunctions
- Proven SICK LifeTime Services



Features

Reading field:	Side
Focus:	Teach auto 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::	30 mm ... 500 mm ^{2) 3)}
Scanning frequency:	60 Hz, WVGA resolution
Internal lighting:	Blue

Light source:	Lighting LEDs: visible blue light ($\lambda = 470 \pm 15 \text{ nm}$) feedback spot: visible green light ($\lambda = 525 \pm 15 \text{ nm}$) Aiming laser: visible red light ($\lambda = 630 \text{ nm} \dots 680 \text{ nm}$)
Laser class:	1 (IEC 60825-1 (2007-3)), complies with 21 CFR 1040.10 except for the tolerance according to "Laser Notice No. 50" from June 24, 2007
LED class:	1 (IEC 62471 (2006-07) / EN 62471 (2008-09)), radiance $L_B < 10 \text{ kW}/(\text{m}^2\text{sr})$ within 100 s, $L_R < 28/\alpha \text{ kW}/(\text{m}^2\text{sr})$ 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 3) For details see reading field diagram

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, Data-Matrix SEMI PV29-0212, 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:	$\leq 4 \text{ m/s}$
Internal image storage:	135 MB
Code qualification:	On the basis of ISO/IEC 16022, ISO/IEC 15415, ISO/IEC 18004, ISO TR 29158/AIM DPM

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:	✓
Function (Ethernet):	Host, AUX, image transmission, OPC DA Server
Data transmission rate (Ethernet):	10/100 Mbit
Protocol (Ethernet):	TCP/IP, FTP (image transmission), PROFINET (with special software only), EtherNet/IP, EtherCAT (optional via external connection module CDF600)
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 (CDF600-2)
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 parameter storage CMC600 in CDB620/CDM420)
Switching outputs:	4 ("Result 1", "Result 2", 2 outputs via CMC in CDB620/CDM420 or "Result 1", "Result 2", "Result 3", "Result 4" using the 17-pin cable with open end)
Reading pulse:	Auto pulse, CAN, Ethernet, Non-powered, Presentation mode, Switching inputs, Serial interface
Memory card:	MicroSD memory card (flash card) max. 32 GB, optional
Configuration software:	SOPAS ET

Mechanics/electronics

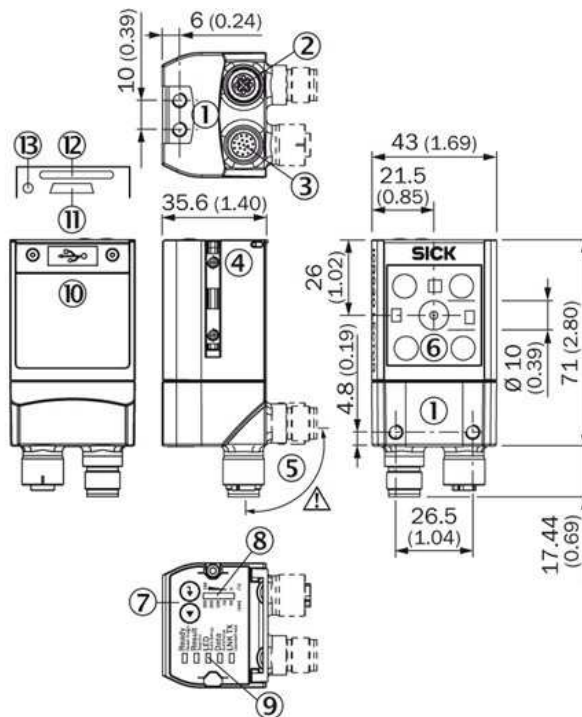
Operating voltage:	10 V DC ... 30 V DC
Power consumption:	Typ. 3 W
Electrical connection:	1 x M12, 17-pin male connector, 1 x M12, 4-pin female connector Ethernet, Cylindrical connections
Housing:	Die-cast aluminum
Housing color:	Light blue (RAL 5012)
Weight:	170 g
Dimensions:	71 mm x 43 mm x 35.6 mm ¹⁾
Enclosure rating:	IP 65 (EN 60529 (1991-10), EN 60529/A2 (2002-02))
Protection class:	III
Lens:	7 mm, 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 immunity:	2,000 lx, on code

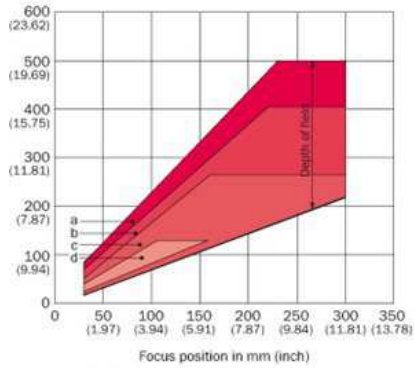
Dimensional drawing



- [1] blind hole thread M5, 5 mm deep (4 x), for mounting
- [2] Ethernet connection
- [3] "Power/Serial Data/CAN/I/O" connection
- [4] Sliding nut M5, 5 mm deep (2 x), for mounting (as alternative)
- [5] Swivel connector unit
- [6] Reading field
- [7] Function button (2 x)
- [8] Bar graph display
- [9] LED for status display (2 levels), 5 x
- [10] Cover (flap)
- [11] "Micro USB" connection
- [12] Slot for microSD memory card
- [13] LED for microSD memory card

Reading field diagram

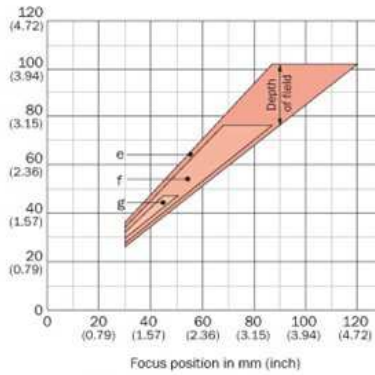
Working distance in mm (inch)



Resolution

a: 1.00 mm (39.4 mil)	c: 0.50 mm (19.7 mil)
b: 0.75 mm (29.5 mil)	d: 0.25 mm (9.8 mil)

Working distance in mm (inch)

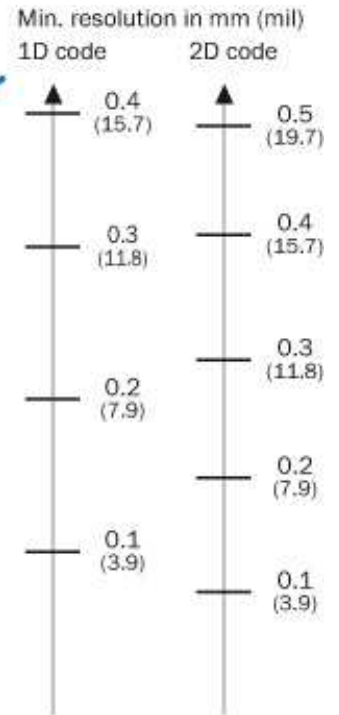
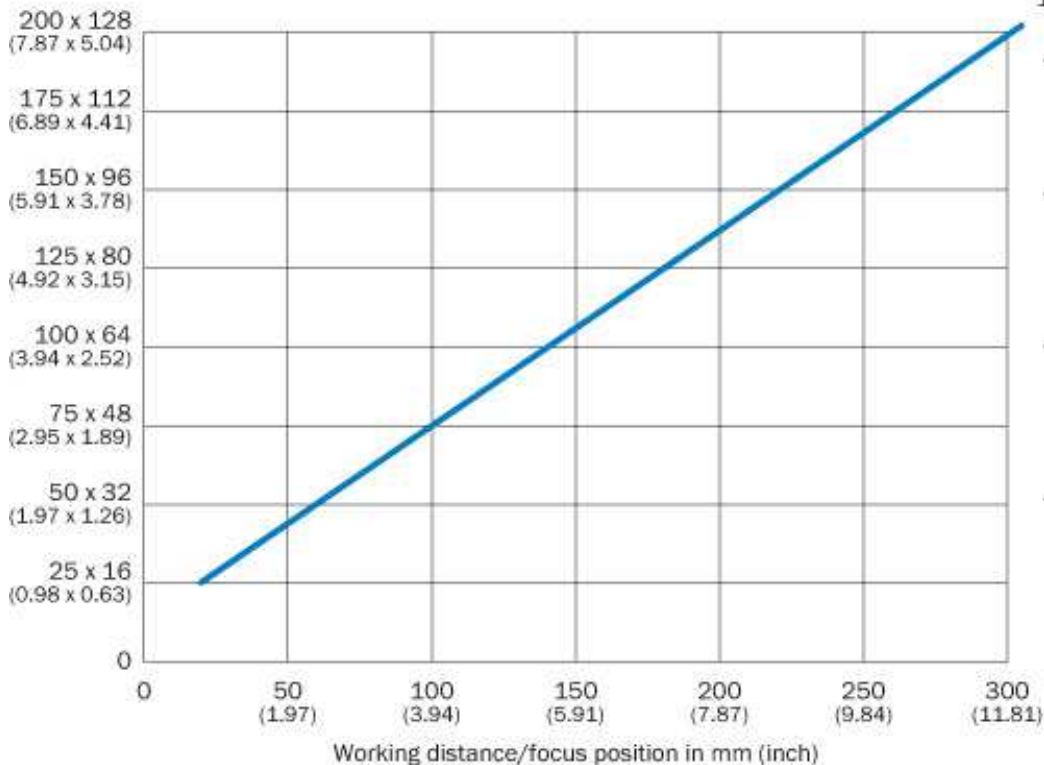


Resolution

e: 0.20 mm (7.9 mil)	g: 0.10 mm (3.9 mil)
f: 0.15 mm (5.9 mil)	

Field of view

Field of view in mm² (sq inch)



— f = 7 mm (ICR620H-T11503, ICR620D-T11503, ICR620D-T17503, ICR620C-T11503S50)

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