



Image-based code readers
Lector®65x / Lector®654 Dynamic Focus for
Systems

V2D654R-MEWHF6 Dynamic Focus for Systems



Model Name > V2D654R-MEWHF6 Dynamic Focus for Systems
Part No. > 1063229



At a glance

- 4 megapixel resolution; high frame repetition rate of 40 Hz
- Dynamic focus adjustment from object to object
- Integrated high-power LED illumination
- Function buttons, aiming laser, optical and acoustic feedback signal
- Intelligent, rapid decoding algorithms

Your benefits

- Highly flexible code position, object height, and transport speed due to a large field of view and dynamic focus
- Cost-effective, straightforward, modular integration of multiple devices adapted to the width of the conveyor belt
- Minimum training and installation work due to intuitive device equipment that includes function buttons, auto setup, integrated illumination, an aiming laser, an acoustic feedback signal, and a green feedback LED
- Intelligent decoding algorithms ensure maximum reading performance and high package throughput, even with codes that are difficult to read
- SICK 4Dpro platform facilitates quick and easy integration into numerous industrial networks



Features

Reading field:	Side
Focus:	Dynamic focus control
Sensor:	CMOS matrix sensor, gray scale values
Sensor resolution:	2,048 px x 2,048 px
Focal length:	54 mm
Code resolution:	≥0.12 mm ¹⁾
Reading distance:	670 mm ... 2,000 mm ²⁾
Scanning frequency:	40 Hz, at 4 megapixels resolution
Internal lighting:	White
Light source:	Lighting LEDs: white (λ = 6000 K ± 500 K) feedback spot: visible green light (λ = 525 nm ± 15 nm) aiming laser: visible red light (λ = 630 nm ... 680 nm)
Laser class:	1M (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:	Risk group 1 (IEC 62471 (2006-07) / EN 62471 (2008-09))

¹⁾ Depends on distance ²⁾ For details see field of view

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, MaxiCode, QR code
Internal image storage:	512 MB
Code qualification:	On the basis of ISO/IEC 16022, ISO/IEC 15415, ISO/IEC 18004
Stacked code types:	PDF417

Interfaces

Serial (RS-232, RS-422):	-
USB:	-
Ethernet:	✓
Function (Ethernet):	Host, AUX, image transmission
Data transmission rate (Ethernet):	10/100/1,000 Mbit/s
Protocol (Ethernet):	TCP/IP, FTP (image transmission), EtherNet/IP
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):	CSN (SICK CAN Sensor Network)
PROFIBUS DP:	-
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:	21 LEDs (10 x status display, 10 x LED bar graph, 1 green feedback spot)
Switching inputs:	0
Switching outputs:	0
Reading pulse:	Auto pulse, CAN, Ethernet, Non-powered, Presentation mode, Switching inputs, Serial interface
Memory card:	MicroSD memory card (flash card) max. 16 GB, optional
Configuration software:	SOPAS ET

Mechanics/electronics

Operating voltage:	24 V DC ± 20 %
Power consumption:	Typ. 20 W, ± 20 %
Electrical connection:	1 x M12, 5-pin plug (CAN), 1 x M8, 3-pin socket (external illumination), 2 x M12, 5-pin female connector (CAN), 2 x M12, 8-pin socket (Ethernet, P1 not yet with function)
Housing:	Die-cast aluminum
Housing color:	Light blue (RAL 5012)
Weight:	963 g
Dimensions:	142.6 mm x 90 mm x 106.1 mm
Enclosure rating:	IP 65 (EN 60529 (1991-10), EN 60529/A2 (2002-02))
Protection class:	III
Lens:	54 mm, integrated

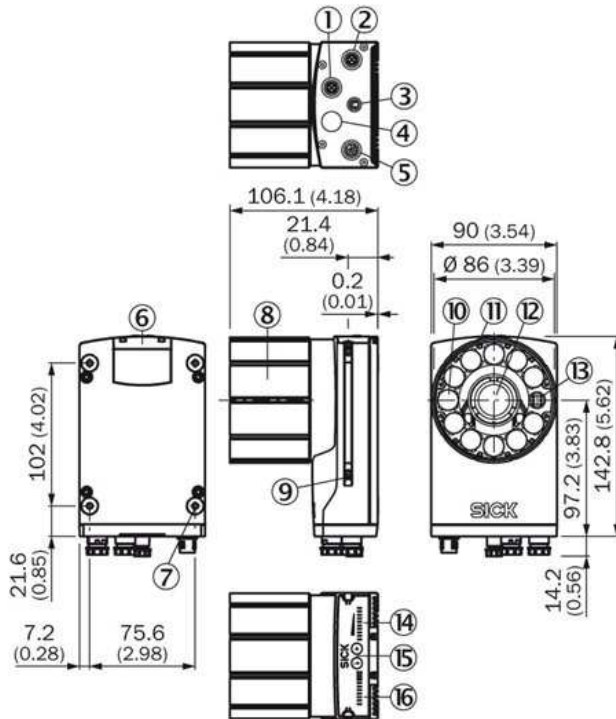
Ambient data

Electromagnetic compatibility (EMC):	EN 61000-6-2 (2005-08)/EN 61000-6-3 (2007-01)
Shock resistance:	EN 60068-2-6
Electrical safety:	EN 60950-1 (2011-01)
Ambient operating temperature:	0 °C ... +50 °C

Storage temperature:
 Permissible relative humidity:
 Ambient light immunity:

-20 °C ... +70 °C
 90 %, non-condensing
 2,000 lx, on code

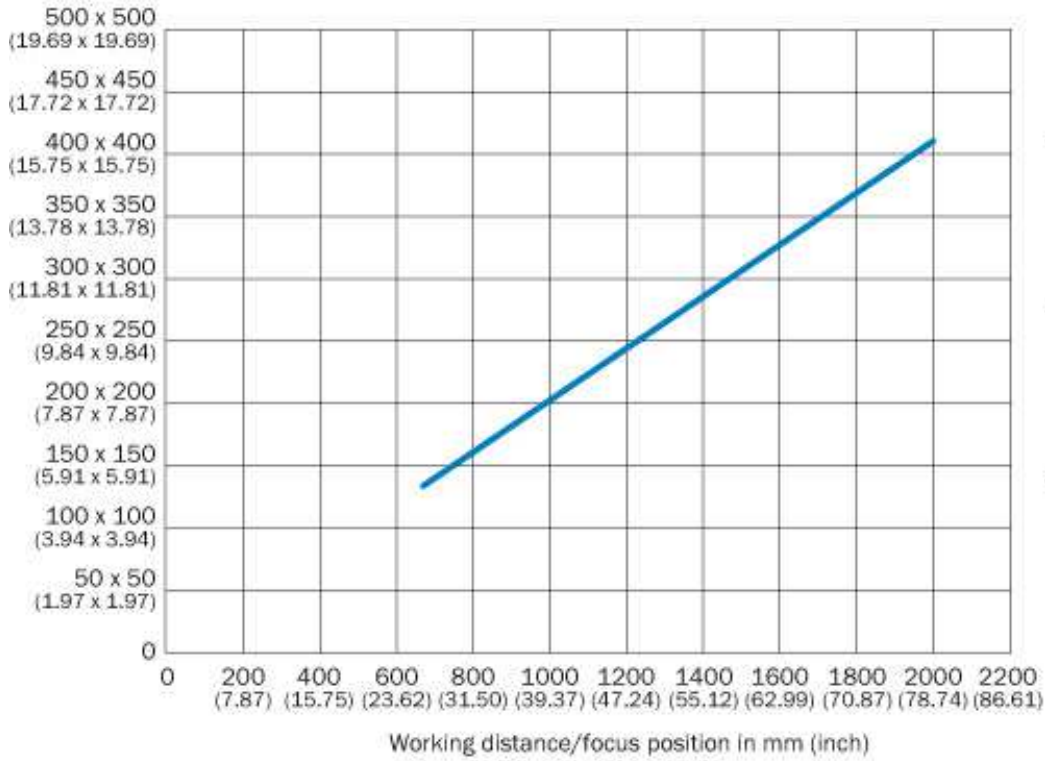
Dimensional drawing



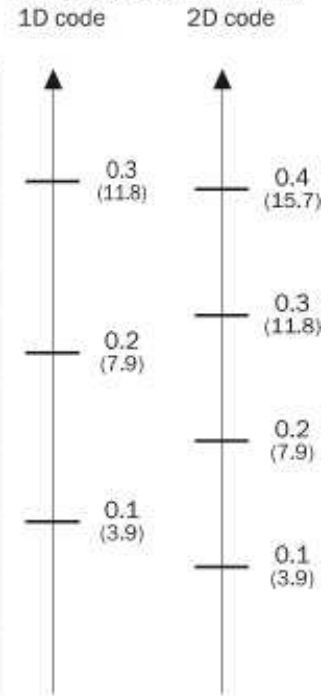
- |1| P1 connection, no function, planned "Ethernet", depending on type
- |2| P3 connection "Ethernet"
- |3| X2 "USB" connection or "trigger external lighting", depending on type
- |4| P2 connection "CAN OUT", depending on type
- |5| X1 "Power/Serial Data/CAN/I/O" connection or "CAN IN", depending on type
- |6| cover (flap) for the slot of the microSD memory card
- |7| blind hole thread M5, 5 mm deep (4 x), for mounting
- |8| lens protective cover
- |9| sliding nut M5, 5.5 mm deep (2 x), for mounting (as alternative)
- |10| green feedback LED
- |11| Ring light
- |12| Lens
- |13| outlet, aiming laser
- |14| Bar graph display
- |15| Function button (2 x)
- |16| LED for status display (2 levels), 10 x

Field of view

Field of view in mm² (sq inch)



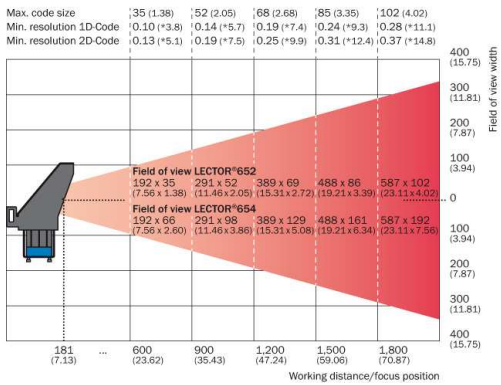
Min. resolution in mm (mil)



f = 54 (V2D654R-xxHxx)

Field of view Lector®65x Dynamic Focus with Panorama 54 mm

Dimensions in mm (inch/* mil)



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