VISOR® V10 Code Reader Advanced, wide field of view

Multi-Code Reader for 1D and 2D codes

CE

IP 67

c UL us LISTED

PROFI NET®

EtherNet/IP™
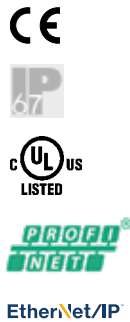
PRODUCT HIGHLIGHTS

- Can be used for all common 2D codes (ECC 200 data matrix) and common 1D barcodes
- Reliable detection of even poorly readable codes under difficult ambient conditions
- Comprehensive tools for flexible and easy connection to PC and PLC environments
- Reading of several similar or differing types of codes in one reading pass

Optical data	
Resolution	800 × 600 pixels
Imaging chip CMOS	1/3.6'', monochrome
Integrated lens, focal length [mm]	5.2 (wide)
Pixel size	4.8 µm × 4.8 µm
Focus	Motorized
Adjustment range	0 mm to infinity
Integrated illumination	White (5000 K), red (635 nm), infrared (850 nm) LEDs
Minimum field of view, X × Y	2 × 1 mm
Target laser	Laser: red (635 nm) class 1 ⚠ (IEC 60825-1)

Functions	
Number of jobs / detectors	max. 255 / max. 255
Detectors	**Barcode:** reading 1D barcodes; EAN, UPC, RSS, 2/5 Interleaved, 2/5 Industrial, code 32, code 39, code 93, code 128, ECC200 GS1, pharm code, codabar; **Datacode:** reading 2D codes: ECC200 (GS1), QR code (GS1), Micro QR code, Aztec code (GS1), PDF 417; **Result processing: Text:** checking and calculating with results from detectors

Electrical data	
Operating voltage, +U_B	18 ... 30 DC[1]
Current consumption (without I/O)	≤ 300 mA
Protective circuits	Reverse-polarity protection, U_B / short-circuit protection of all outputs
Power On Delay	Approx. 13 s after Power on
Outputs	PNP/NPN (switchable)
Max. output current (per output)	50 mA, 100 mA (pin 12)
Switching threshold inputs incl. encoder	PNP/NPN High > U_B-1 V / Low < 3 V
Input resistance	> 20 kΩ
Interfaces VISOR® V20-CR-Advanced	Ethernet (LAN), EtherNet/IP, PROFINET, SensoWeb, Service Port
Inputs/outputs	2 inputs, 2 outputs, 6 selectable inputs/outputs
Encoder	✓

Mechanical data	
Dimensions	70.4 × 45 × 45 mm (without plug)
Enclosure rating	IP 67 & IP 65
Material, housing	Aluminium, die-cast, RoHS compliant
Material, front screen	Plastic
Ambient temperature: operation	0 ... +50 °C[2]
Ambient temperature: storage	-20 ... +60 °C[2]
Weight	Approx. 200 g
Plug connections	Supply and I/O M12, 12-pin Ethernet M12, 4-pin
Vibration resistance	EN 60068-2-6
Shock resistance	EN 60068-2-27

[1] Max. ripple < 5 V_{SS} [2] 80 % air humidity, noncondensing

VISOR® vision sensor

153-13554

Laser

41

12.5

39

21.5

Optical center

22.5

14   70.4

9

Laser axis

Optical axis

45

43

2   14

18.5

M12x1 (2x)

12.25

4

Field of view V10, wide

155-03101

Field [mm]

300
200
100
0
-100
-200
-300

0   100   200   300   400   500   600   700

Working distance [mm]

x direction
y direction
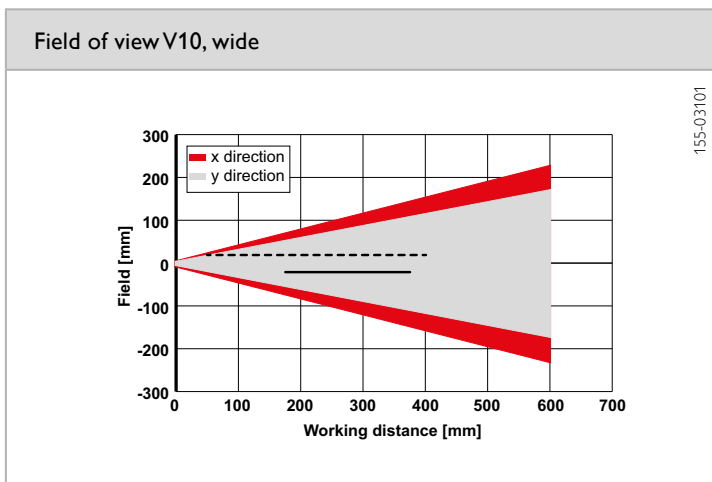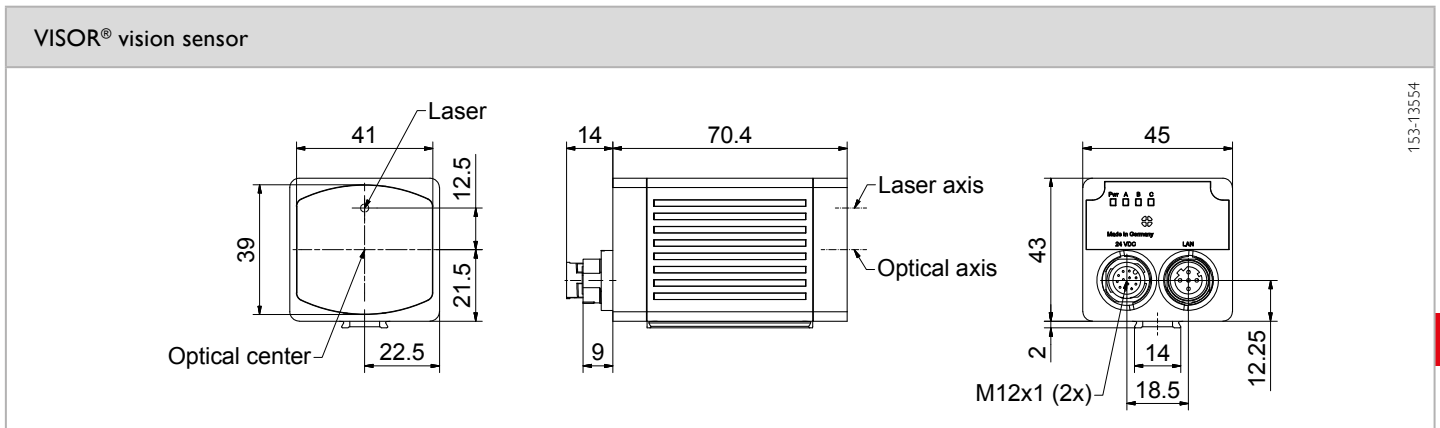
- - - - -   Increased depth of field

———   Normal depth of field

Illumination	Part number	Article number	Accessories	
White	V10-CR-A3-W-W-M2-L	631-91051	Connection cables	www.sensopart.com/en/accessories
White	V10-CR-A3-W-WD-M2-L	631-91035	Illumination	
Red	V10-CR-A3-R-W-M2-L	631-91054	Brackets	
Red	V10-CR-A3-R-WD-M2-L	631-91033	Interface accessories	
Infrared	V10-CR-A3-I-W-M2-L	631-91057		
Infrared	V10-CR-A3-I-WD-M2-L	631-91031		