

V20-OAI-A4-W-M-M3-L

Ordering information

Designation for ordering	V20-OAI-A4-W-M-M3-L
Part number	637-91121
Order text	VISOR® XE V20 Object AI Advanced, white illumination, medium field of view, motorized focus, LAN interface, target laser
Components supplied	VISOR® XE vision sensor, Operating manual, Mounting bracket (MK 45) and Allen key

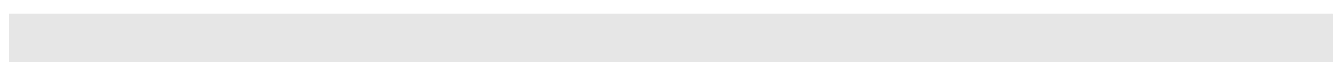


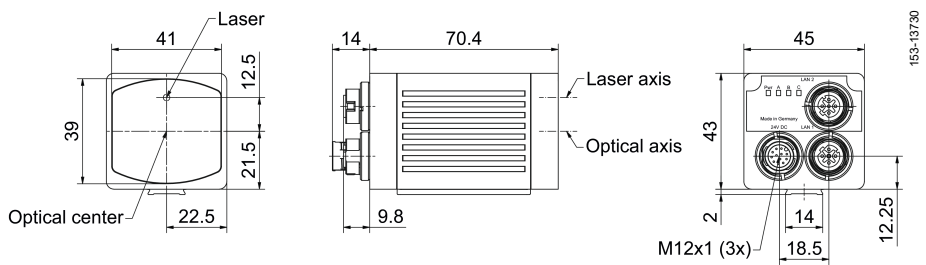
Optical data	
Image chip type	Monochrome
Light source	LED
Light color	White
Wavelength [°K]	4500
LED risk category [RG]	1
Resolution	SPXGA
Number of pixels (H x V) [px]	1600 x 1200
Imaging chip technology	CMOS
Sensor size ["]	1/2.9
Pixel size [µm]	3.00
Field of view type	Mittel
Operating distance [mm]	30 ... 10,000
Focal length [mm]	12.0
Opening angle [°]	23.0
Min. field of view (X x Y) [mm]	13.5 x 10.1
Aperture number	2.8
Depth of field	Standard
Focus drive	Motorized
Target laser	Laser rot (655 nm)
Laser class	1 (IEC 60825-1)

Functions	
Network protocol	TCP/IP, Profinet, EtherNet/IP, sFTP, SMB, FTP, Service Port
Hardware	VISOR® XE
Max. number of jobs	255
Max. number of detectors	255
Alignment	Contour comparison, Pattern matching, Edge detection
Available detectors	Pattern matching, Contour, Contour check, BLOB, Brightness, Contrast, Gray level, Caliper, Classification (AI)
Result processing	Numbers
Pre-processing	Arrangement, Filter
Calibration	Board (measurement), Scaling (measurement)
Robotic functions	-
Additional functions	Archiving, Image transmission, individual overlays, Multiple image acquisition, Multiple detection for contour and pattern matching detector, Job checksum

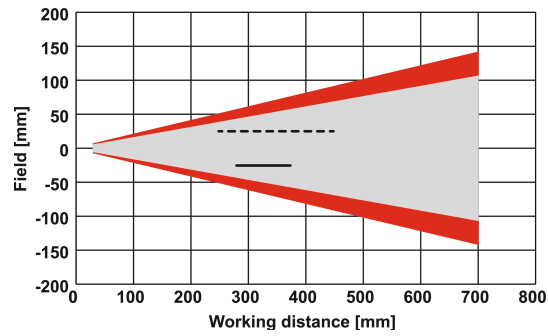
Electrical data	
Operating voltage U_B [V DC]	18 ... 30
Typical current draw [mA]	350
Type of voltage source	The device must be supplied by a "Class 2" power supply unit.
Readiness delay [ms]	$\leq 16,000$
Reverse polarity protection	Yes
Overvoltage protection	No
Residual ripple [%]	≤ 5 Vss, level 3
Explanation of residual ripple	EN 61000-4-17
Polarity	PNP/NPN
Short circuit protection	Yes
Input threshold (High)	$> U_B - 1V$
Input threshold (Low)	$< 3V$
Input resistance [$k\Omega$]	> 20
Max. output current [mA]	50
Explanation of max. output current	max. 100 mA on pin 12
Inductive loads	Typ.: Relay 17 K / 2 H, pneumatic valve 1.4 K / 190 mH
Max. output current (total) [mA]	200
Ethernet transmission rate [Mbit/s]	100
Number of switchable IOs	6
Number of outputs	2
Number of inputs	2
Encoder functions	No

Mechanical data	
Height [mm]	85.0
Length [mm]	45.0
Width [mm]	45.0
Weight [g]	~ 220
Front panel material	PMMA
Housing material	Aluminum (cast)
Connection name	Supply
- Number of pins	12
- Coding	A
- Thread	M12x1
- Material	Metal
- Type	Plug
Connection name	LAN
- Number of pins	4
- Coding	D
- Thread	M12x1
- Material	Metal
- Type	Socket
Connection name	LAN
- Number of pins	4
- Coding	D
- Thread	M12x1
- Material	Metal
- Type	Socket
Ambient temperature: operation [°C]	0 ... 50
Explanation of ambient temperature: operation	< 95% humidity, non-condensing
Ambient temperature: storage [°C]	-20 ... 60
Explanation of ambient temperature: storage	< 95% humidity, non-condensing
Protection class	IP 65, IP 67
Explanation of protection class	For C-mount devices, only in combination with protective tube
Vibration and shock resistance	EN 60068-2-6, EN 60068-2-27



Technical drawings	
Dimensional drawing	 The technical drawings show three views of the sensor unit: Front View: A square-shaped front panel with a width of 41 mm and a height of 39 mm. The optical center is marked at the center. The distance from the top edge to the optical center is 12.5 mm, and from the bottom edge is 21.5 mm. The distance from the left edge to the optical center is 22.5 mm. A laser axis is indicated pointing towards the center. Side View: Shows the profile of the unit with a total length of 70.4 mm. The mounting bracket on the left has a width of 14 mm and a height of 9.8 mm. The laser axis and optical axis are indicated. Rear View: Shows the back of the unit with a width of 45 mm and a height of 43 mm. It features four M12x1 (3x) ports arranged in a 2x2 grid. The distance between the ports is 14 mm horizontally and 18.5 mm vertically. The total height from the bottom of the ports to the top of the unit is 12.25 mm. The total height of the unit is 153-137/30 mm.

Field of view



155-03769

Product link

<https://www.sensopart.com/en/products/details/637-91121>