

VISOR® Robotic

An eye on everything – the vision sensor for robotics applications



VISIONSYSTEMSDESIGN
2020 Innovators
Awards

 made in Germany

The expert sensor for robotics applications



A diverse specialist

The expectations of today's robotics solutions are steadily rising in the context of Industry 4.0, paired with a simultaneous desire for greater ease-of-use. And this is precisely where the VISOR® Robotic demonstrates its outstanding ability. Available in several versions, it offers the perfect solution for a variety of automation tasks.

Designed with an integrated and standardised interface, VISOR® Robotic can be easily incorporated in existing installations and systems, and thanks to different calibration methods and flexible data structures, it is also suited to a diverse range of procedures.

HIGHLIGHTS OF VISOR® ROBOTIC

- Compact and lightweight housing for mobile or stationary use
- Calibration methods tailored to the application
- Target Mark technology provides 3D object poses in no time
- Simplified installation through 3D grip point transformation
- Less robot programming with diverse imaging positions
- Different hardware versions up to 5 megapixels



To product finder and other details:
<https://www.sensopart.com/en/robotics/>

Greater flexibility for robotics applications

Reliable feeding of material

Thanks to VISOR® Robotic, components that are fed in a universal tray or via a supply bin are reliably located and gripped. When loose components are supplied, the sensor not only checks their position but also inspects the free space around the gripper. The VISOR® determines both sets of information and sends them to the robot controller via one of the integrated standardised interfaces. The process is then managed based on the information received.

The benefits for you:

- Cost advantage due to use of universal tray
- Precise feeding, without mechanical alignment
- Easy installation of vision sensor through slimline design and functions tailored to the application.



The position of components supplied in a tray can vary so strongly that robot guidance is necessary.

Precise processing of components

During robot-guided applications, such as screw positioning, VISOR® Robotic effortlessly detects the pose of components; this allows the correction of any offset and improves the quality of production. Mechanical effort is reduced, and the production line is consequently more flexible. The VISOR® Robotic concept enables direct communication between the VISOR® and the robot, and an additional instance can subsequently be omitted for many applications.

The benefits for you:

- Stable process despite varying positions of parts being fed
- Added flexibility with increasing number/diversity of variants
- Reduced programming due to calculation of 3D destination position for robot by VISOR® Robotic.



The VISOR® Robotic identifies the exact position of the cordless screwdriver. Offset data is used to correct the robot's trajectory.

Precision for mobile workstations

Use of mobile robots must be safe and efficient. To achieve this, the size of the safety zone must be rigorously defined, and also extremely reduced to offer the worker maximum freedom of movement. With the aid of Target Mark technology, VISOR® Robotic allows mobile robots to move with precision to the workstation and e.g. to connect themselves there mechanically via a plug.

The benefits for you:

- High availability due to robots' implementation of workstation safety zones
- Fast procedures due to compensation of 3D offset using 2D vision sensor with image capture



Target Mark technology enables easy identification and precise referencing of your mobile work stations.

Email your questions to the following address: robotic@sensopart.com

VISOR® Robotic – Product overview					
Order reference	Functions	Resolution	Field of view	Alternative LED lighting	Article no.
V20-RO-A3-R-W-M2-L	Robotic	1440 x 1080 pixels	wide	white, infrared	632-91067
V20-RO-A3-R-M-M2-L			medium	white, infrared	632-91068
V20-RO-A3-R-N-M2-L			narrow	white, infrared	632-91069
V20-RO-A3-C-2			dependent on lens selected*	none	632-91073
V50-RO-P3-R-M-M2-L	Robotic, identification, extended calibration, 3D localisation	2560 x 1936 pixels	medium	white, infrared	635-91037
V50-RO-P3-C-2			dependent on lens selected*	none	635-91040
V20-RO-P3-C-2		1440 x 1080 pixels	dependent on lens selected*	none	632-91129
V20-RO-P3-R-W-M2-L			wide	white, infrared	535-91123
V20-RO-P3-R-M-M2-L			medium	white, infrared	632-91124
V20-RO-P3-R-N-M2-L			narrow	white, infrared	632-91125
V10-RO-A3-R-W-M2-L	Robotic	800 x 600 pixels	wide	white, infrared	631-91076
V10-RO-A3-R-M-M2-L			medium	white, infrared	631-91077
V10-RO-A3-R-N-M2-L			narrow	white, infrared	631-91078
V10-RO-A3-C-2			dependent on lens selected*	none	631-91082
V50C-RO-P3-W-M-M2-L	Robotic, identification, extended calibration, 3D localisation, color evaluation	2560 x 1936 pixels	medium	none	635-91042
V50C-RO-P3-C-2			dependent on lens selected*	none	635-91043
V20C-RO-P3-C-2		1440 x 1080 pixels	dependent on lens selected*	none	632-91133
V20C-RO-P3-W-W-M2-L			wide	none	632-9113
V20C-RO-P3-W-M-M2-L			medium	none	632-91131
V20C-RO-P3-W-N-M2-L			narrow	none	632-91132

* Available separately.