## UNIVERSAL ROBOTS

### What is it

VISOR<sup>®</sup> Robotic is a vision sensor for robotics applications. Its integration is easy – even robot programmers without vision experience can set it up within a few minutes.

Typical applications:

- Locating parts on trays, feeders, belts etc.
- Locating trays or workplaces etc.
- Guiding robots for all kinds of assembly applications

SensoPart has more than 20 years of experience with industrial sensors and more than 15 years of experience with machine vision sensors –

We know how to make robust and reliable components for industrial applications!

### **Features and benefits**

- Part of the succesful VISOR<sup>®</sup> product family offers additionally to robot calibration and part detection all the inspection and measurement functions of the VISOR<sup>®</sup> Object.
- High resolution 1,3 MPixel camera with internal optics and illumination or c-mount.
- Optional color sensor, e.g. for robust detection on colored background or for solving additional sorting tasks.
- Cycle times down to less than 100 ms per image.
- Robust towards ambient light, by using high power red or infrared LED light.
- Robust towards reflections, by using polarization filters and robust image processing algorithms.

### How does it work?

VISOR<sup>®</sup> Robotic with URCap is a flexible, fast and robust solution for 2D vision guided robotics. A new part can be taught with a few mouse clicks thanks to:

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- Easy to use VISOR configuration
- Step by step guidance for camera calibration in the URcap
- Step by step guidance for part location in the URCap

Further functions and highlights:

- Various methods for part detection
- Live image from the vision sensor
- Job (production recipe) management
- Expert mode for advanced functions offering full flexibility
- 2 calibration methods (calibration plate or point pair list)
- Check for gripping space and gripper correction
- Integrated and standardized interfaces (Profinet, EtherNet/IP, TCP/IP)

#### Software version required:

UR Polyscope Version > 3.4

SensoPart VISOR PC-Software and Firmware, Version > 1.22.X.X

#### **Dependences:**

Configuration of the VISOR® vision sensor requires a standard PC/notebook (at least Pentium 4,

1GHz and 1 GB RAM, with Microsoft Windows 7 or Windows 10) with network connection or network

with TCP-IP protocol. In production mode ("run-mode") the VISOR does not need to be connected to a PC, only to the robot.

#### **Certifications and standards:**

CE, UL, ISO 9001:2000, DIN EN 60947-5-2, DIN EN 60068-2-6, DIN EN 60068-2-27

#### **Dimensions:**

VISOR vision sensor with internal optics and illumination: 80 x 45 x 45 mm

#### What's in the box?

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Three VISOR Robotic UR kits are available:

- VISOR Robotic UR-Starter Kit V10
- VISOR Robotic UR-Starter Kit V20
- VISOR Robotic UR-Kit V20 C-Mount

These kits contain all the necessary components for getting started and include VISOR<sup>®</sup> Robotic vision sensor, 5m cables, UR robot mount, 200 mm calibration plate and (depending on configuration) external illumination, lenses and further mounts.

#### License type:

- One-time purchasing of VISOR® Robotic / VISOR® Allround Professional vision sensor
- UR+ plugin download from SensoPart website available for free

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