

# Vision Guided Robotics

Easier than ever before – *VeriSens*® for Universal Robots (UR) control

Robots with “eyes” offer enormous versatility in the application. Pick and place flexibility, gripper clearance checks, overlap inspection, quality control, object identification and more – image processing paves the way.

## Why is *VeriSens*® so unique for use with Universal Robots?

- **Really easy:** It takes only two commands in UR programming to access the many great benefits of image processing, such as object tracking. Thanks to their excellent usability, vision sensors and robots significantly cut down on operator training time.
- **No longer manual but automated:** Automated coordinate alignment via *SmartGrid* eliminates the conventional required elaborate manual “hand-eye” procedure.
- **Matching all:** Object tracking, quality control, identification, installed at robot or overhead – the universal concept will support you in virtually any application and allows for fast adaptations.



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Passion for Sensors

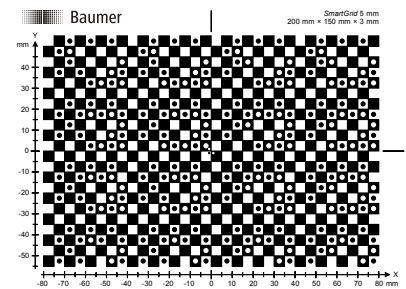
# Application versatility

- **Control object pick and place:**  
Finding any positioned objects (even several at once) on a storage area, checking any overlaps and gripper clearance, picking one after the other and placing them in the correct position.
- **Quality control:**  
Use waypoints in various task of quality inspection with up to 32 feature checks.
- **Object identification:**  
Use waypoints for easy object identification, e.g. by bar codes or matrix code and reading plain text (OCR).

## SmartGrid

Innovative *SmartGrid* is the centerpiece for fast setup in few minutes:

- Teach-in for correction of image distortion in real time
- Conversion to world coordinates and orientation within the coordinate system
- Z-calibration for 3D scaling of coordinates
- Automated coordinate alignment between *VeriSens*® and Universal Robot



## Pick & Place programming example

Deploy Universal Robots as usual but add more flexibility: *VeriSens*® waypoints are defined by image processing and your own inputs (offset values), adapting this way to flexible object positions. Where several objects are involved, the robot will process the positions one after another.



## Accessories

Easy access to the world of Vision Guided Robotics with Universal Robots and *VeriSens*® thanks to the wide selection of accessories including *SmartGrid* in various formats, mountings and Starter Kits including all you need for getting started.



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