

# ORBITAL DEPTH SENSOR

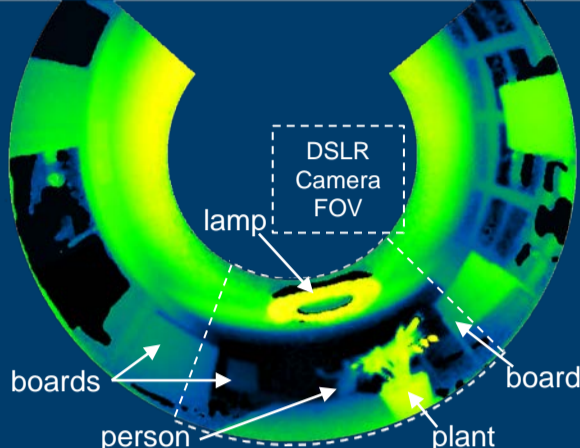


## EXPANDING THE BOUNDARIES OF IMAGING TO DELIVER BREAKTHROUGH SOLUTIONS

Jabil's Orbital Sensor, based on time-of-flight technology, captures depth information in a radial format, removing the need for multiple independent sensors on robotics platforms. With its large field of view, the innovative solid-state sensor supports state-of-the-art object detection and collision avoidance algorithms.

Benefits include:

- Improved Safety
- Reduced Complexity
- Reduced Cost



## SPECIFICATIONS

**FOV** | HFOV: 270° VFOV: 60°

**FRAME RATE** | 30fps

**POWER INPUT** | 24V / 0.6A average

**RESOLUTION** | 640x480 pixels

**PROCESSOR** | NXP iMX8M-Mini

**WAVELENGTH** | 850nm / (940nm)

**DETECTION RANGE** | up to 5m

**DIMENSIONS** | Height: ~125mm Width: ~95mm

**TOUCH DISPLAY** | 320x240 pixels

**INTERFACE** | Ethernet/USB2.0/WiFi/Bluetooth/SD

**PATENT PORTFOLIO** | System, optics, control

**CUSTOM LENS DESIGNED BY JABIL**

## APPLICATIONS

The Jabil Orbital Sensor's wide field of view provides robotics companies with a new sensing tool for their innovative and complex platforms.



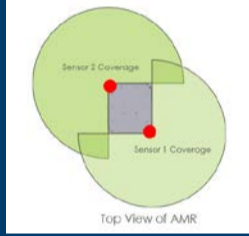
Autonomous Mobile Robots



Collaborative Robotics



Drones



## JABIL ORBITAL SENSOR

The current Orbital Sensor, with 270° HFOV, was optimized for AMRs. Complete radial coverage can be obtained by mounting two Orbital sensors. Jabil has designed sensors with 360° HFOV coverage, if that format is more suitable for a particular AMR or collaborative robot implementation.



## WHY JABIL OPTICS?

Jabil Optics specializes in providing complex optical design & manufacturing solutions to address our customers' most critical needs in the automotive, AR/VR, robotics, healthcare, mobile, consumer, and industrial markets.

We offer the complete portfolio of services from concept design, to supply chain, to high volume manufacturing.



World Class **Optical Design** in Leading Innovation Centers



Full Portfolio of **Active and Passive** Assembly Technologies



Active Alignment **Process Transfer** into Jabil High UPH Machines



**Miniaturization** Expertise (Projectors, Camera Modules)



**Custom Test Equipment**



**Custom Algorithms** for Production & Test



Global **Supply Chain**



**IP Protection**



**Rapid Prototyping & Scalable Manufacturing**

## JABIL OPTICS CREATION CENTER (JOCC)



JOCC is a state-of-the art manufacturing facility (ISO 7) optimized for prototyping, low-volume manufacturing, and supporting our customers' transition to Jabil's high-volume manufacturing facilities.

Services include:

- Optical assembly
- Rapid prototyping
- Product verification & test and more....