

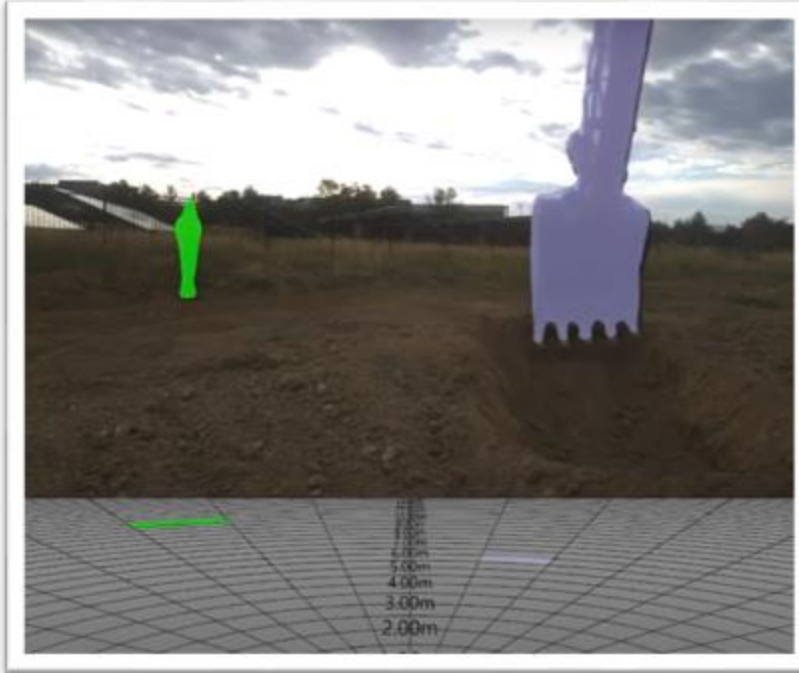


Features	Benefits
<ul style="list-style-type: none"> • Low level radar & vision sensor fusion reduces false positives • Radar for range and velocity • Vision for detection, segmentation 	<ul style="list-style-type: none"> ➤ Enhanced safety, spatial awareness and high reliability for autonomous equipment in poor lighting & bad weather ➤ Radar provides reliable data in poor visibility such as fog, dust , rain when vision systems degrade
<ul style="list-style-type: none"> • Software defined smart multi-sensor 	<ul style="list-style-type: none"> ➤ Single sensor platform able to address a range of tasks ➤ Reduces inventory, installation and repair time/costs
<ul style="list-style-type: none"> • Industry Standard interfaces GPS, WiFi, LTE, Ethernet & CANBus 	<ul style="list-style-type: none"> ➤ Simplified integration for standard perception features ➤ Accelerated data collection for custom AI training ➤ Enterprise data integration, standard formats & API's
<ul style="list-style-type: none"> • Fully integrated, compact design with industrial grade electronics, all-weather sealed enclosure, connectors, cables 	<ul style="list-style-type: none"> ➤ Quick installation anywhere on equipment ➤ High reliability without additional cooling ➤ Fast and easy to replace in event of damage
<ul style="list-style-type: none"> • Scalability 	<ul style="list-style-type: none"> ➤ Standard product for eval, development and trials ➤ Licensable IP for customization and volume production

3D Spatial Perception Applications

Enhanced Safety, Situational Awareness, Operator Assist, Autonomous Operation

Pedestrian Detection, Ranging and Terrain Mapping (semantic segmentation)



Technical Specifications

Latency	15 fps, < 200ms
Field of View	84° ↔ 52° ↕ 105° ↗ Radar: +/- 67.5° ↔ (azimuth), +/- 7.5° ↕ (elevation)
Detection Range Pedestrian	Vision: 1 - 30m (3 - 100ft) Radar: 1 - 15m (3 - 50ft)
Visual Resolution	4K / 8MP (3840x2160) CMOS Sensor 2 μm x 2 μm pixels for low light sensitivity
Radar	76-77 GHz configurable for short and long range
AI Processors Peripherals	i.MX8M Plus (Quad A53 + NPU) + AI Accelerator LTE Modem, GNSS, 9 axis IMU, Temp & Humidity
Environmental	-40°C to +65°C Industrial Temp, passive cooling IP67 Rated Enclosure
Electrical	1xRJ45 IP67 waterproof Ethernet 1xM12 10-27VDC (10W), RS-485/CANbus 2xSMA optional external GPS + LTE antennas
Mechanical	120 x 130 x 90mm (4 ¾ x 5 x 3 ½ in) 600g (21 oz) Multiple ¼ - 20 mounting points

