

ZEBRA 3S40

3S40-4LKIT0-000DA

Structured-light sensor kit FOV 1091mm x 761mm @ 1245mm, with Aurora Design Assistant full license, and accessories.

- Plug and Play Technology
- Large Scanning Area
- PoE and 24V Powering Options
- Powerful and Light Weight



PRODUCT DESCRIPTION

The Zebra 3S40 is a high-resolution structured-light 3D sensor designed to capture dense, true per-pixel point clouds of static scenes. It generates approximately 1.5 million points per scan with a resolution of 1440 × 1080, completing each capture in around 450ms. Operating effectively within a range of 870–2150 mm and with an optimal sweet-spot at ~1245 mm, it covers a field of view from roughly 723 × 530 mm up to 1626 × 1312 mm. Its structured-light projector, coupled with ambient-light suppression, ensures consistent, high-fidelity capture even under challenging factory illumination. Lightweight (~950 g), compact (approx. 416 × 68 × 86 mm), and PoE+ capable, the device is ruggedised to IP65 standards for resistance to dust and water spray, making it suitable for mounting on gantries or robotic arms.

Engineered for logistics and manufacturing, the 3S40 excels in depalletization, static dimensioning, and oversized-item inspection tasks. Its large scanning volume supports 3D measurement of parcels, crates, and industrial goods, while its sub-millimetre accuracy lends precision to quality assurance and defect-detection processes. Integration is seamless via GigE Vision and Zebra's Aurora software suite, either Design Assistant or Vision Studio, offering intuitive setup, image capture, and analysis workflows. Deployment is further streamlined with plug-and-play compatibility alongside Zebra's 4Sight EV7 controller, power-over-Ethernet, and optional 24 V input. Typical real-world uses include robotic "hand-eye" setup for picking/placing, inline inspection of static components, dimensional measurement for packaging compliance, and inspection of heavy or unwieldy items that exceed the range of smaller 3D sensors.

TECHNICAL DATA

Calibration accuracy (1 σ)	0.5 mm
DC input	PoE or 24V
Depth	86 mm
Height	68 mm
Point to point distance	0.82mm
Scanning area at maximum spot	588mm x 444mm
Scanning range max	2150 mm
Scanning range min	870 mm
Scanning time	450 ms
Temporal noise (1 σ)	0.45 mm
Weight	1.3 kg
Width	416 mm