

Specification and scope of supply Opti-Scan 350.10

Description	Specification/scope of supply
Max Single scan area ^{1&2}	350mm (X) x 215mm (Y)
Max Single scan depth ^{* 1,2 & 3}	215mm (Z)
Volumetric accuracy**	15 microns
Repeatability**	10 microns
Point Spacing	Better than 75 microns
Scanning speed***	> 250,000 points per second.
Scanning time****	< 10 seconds (single scan)
Processing time*****	< 5 seconds
Peripheral equipment	Table lighting controller, Standard Computer Interface
Recommended Operating System	Windows 10 64bit
Software included:	3D scanning, automated repositioning, texture map acquisition, 3D color rendering, creation of cross-sections, creation of 3D edges, reverse engineering of 3D edges to DXF/DWG, comparison of 3D edges to DXF/DWG, reverse projection of colored deviation reports onto part, creation of 3D point clouds in PLY, STL, VRML, ASCII formats, creation of texture mapped point clouds, calibration software.
Free 3D Inspection Software:	Fully compatible with off the shelf free 3D inspection software. Functionality includes comparison to 3D solid models, dimensioning, GD&T, cross-sections, full surface deviation inspection, merging of scans, customizable reports, automatic alignment of scan to CAD, point cloud meshing, processing and filtering, extraction of nominal data from CAD model, comparison of 2 scans.
Advanced 3D inspection software option (Geomagic Control)	Available on request. Comparison to 3D solid models, GD&T, SPC, cross-sections, full surface and edge inspection, creation of report templates, automated merging of point clouds, automatic alignment of scan to CAD, automatic point cloud processing and filtering, automatic detection or repositioning spheres, macro creation for full automation, automatic extraction of nominal data from CAD model, comparison of 2 scans.
3D reverse engineering (advanced package)	Available on request. Creation of 3D solid models from scan data.
Calibration Kit	Included as standard, retro-reflective reference markers mounted onto steel plate with repositioning frame
Accuracy Verification Object	Included as standard, calibrated hardened steel ball bar
OptiScan construction	Camera and projector assemblies mounted in a internal aluminium subframe, housed in a integral moulded enclosure made from ABS (Carbon fibre effect).
OptiScan enclosure	Welded steel base frame complete with pivoting sub frame, enclosed edge lit lighting table, Motorised rotational disc mounted on high load Xirodur polymer bearings and linear actuators for vertical tilting motion. Complete machine enclosed in removable canopy, constructed of aluminium with acrylic outer panels.
Automated turn-table maximum load (UDL)	20kg
Camera	>20 megapixels.
Projection source	Full HD 1080p 1920x1080 native resolution LED projector.
Data cables	HDMI and USB3
Power supply	110-240V 50/60Hz
Power consumption	2 Amp maximum at 230 Volt, 4 Amp max at 110 Volt.
EC directives	Compliant with Machinery, Low voltage and EMC Directives.
Paint colour	Frame and Outer canopy: RAL5013 Blue
Ambient operating conditions	5-35 degree C
Available configurations	L= Light Table E = Enclosure A = Automatic Repositioning disc M = Manual Repositioning disc AA = Automatic repositioning disc & tilt mechanism
Approx Footprint width/ depth/ height/ weight (OS350.10 Scanning Head Only)	(455 x 305 x 224mm) – 12KG
Approx Footprint width/ depth/ height/ weight (OS350.10 – Standalone Tripod Option)	(829 x 729 x 1323mm) < 25KG
Approx Footprint width/ depth/ height/ weight (OS350.10 LEAA)	(1474 x 885 x 1207mm) < 250 KG
Standard packing	Export crate suitable for sea shipping
Warranty	One year limited warranty on hardware and software
Optional extended warranty	Two or three year extended warranty (requires software upgrade option)
Software support option	Annual support contract provides free software upgrades

1 Larger parts can be measured with multiple scans

2 Other sizes are available on request, exact dimensions may vary by slightly depending on setup.

3 Other accuracies are available on request

*Actual scanning range will be significantly larger, however measurements outside of this range may have additional noise.

**Accuracy achieved by measuring a reference object at various locations within the measuring volume, contact InspecVision for further details.

***Time taken to measure a typical component. Results may vary depending on part measured or speed of computer

****Time taken to process the measurements of a typical component. Results may vary depending on part measured or speed of computer.

Actual measuring accuracies achieved will depend on operating environment, user input, quality and condition of materials

Due to our policy of continuous improvement specifications are subject to change without notice, please contact factory or your InspecVision dealer

Opti-Scan 350.10 Schematic

[DIMENSIONS IN BRACKETS ARE IN INCHES]

