



iSCAN3D - Laser Line Scanner

METROLOGY GRADE HAND-HELD LASER SCANNER

Integrated with Radian Plus and Pro Laser Trackers, iScan3D's crossed blue laser lines are capable of scanning in any direction. Dual stylus-mounting locations for probing of hidden features provide measurement flexibility with precise results. iScan3D can scan a wide variety of surface textures, including high-gloss and contrast areas. It also provides unique probing ability for hidden-point measurements.

FEATURES & BENEFITS

- **Large Scanning Volume** - iScan3D works in tandem with API's Radian Laser Trackers to scan large areas. Its rotating head provides flexibility by allowing complete 360° rotation.
- **RFID** - Automatic probe stylus recognition uses RFID technology to automatically identify probe length and tip size of the stylus and eliminate user probe selection during measurements.
- **Smart Buttons** - Pre-programmed buttons for better hardware and software interaction minimize user computer interaction with full measurement control at their fingertips.
- **Blue Crossed-Lines Scanner** - Crossed laser lines provide the ability to scan a surface in any direction with ease and flexibility.
- **Tactile Probing** - A variety of probe styli (up to 500mm supported) to suit every application provide the ability to probe profound features.
- **Dense Point Cloud** - Blue lasers and high-resolution camera provide dense point cloud with fine details of the features in real-time.
- **Dynamic Stability** - Advanced electronics, gyroscopes and level sensors compensate for small perturbations and hand vibrations during measurement.
- **Controllerless** - The versatility of iScan3D makes large-scale scanning quick and simple.

APPLICATIONS

- Reverse Engineering
- Flush and Gap
- Surface Contours
- Large Body Assemblies
- Rapid Prototyping
- Mold and Die Cavities
- Compare CAD
- Fixture Inspection
- Tooling, Fixtures, and Jigs





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PRODUCT SPECIFICATIONS

| System Accuracy | | | |
|-----------------------|--------------------------------------|-------------|------------------|
| | 2 -7 Meters | 7-15 Meters | Above 15 Meters |
| Spatial Length (2σ) | ± 50μm | ± 80μm | ± (20μm + 4μm/m) |
| Sphere Radius (2σ) | ± 50μm | ± 75μm | ± (30μm + 4μm/m) |
| Surface (2σ) | ± 60μm | ± 70μm | ± (80μm + 2μm/m) |
| Attributes | | | |
| Angle Acceptance | ±45°(Pitch and Yaw) 360° Roll | | |
| Sampling Frequency | 100Hz | | |
| Max. Scanning Speed | 200,000 pts/sec | | |
| Laser Line Width | 150μm | | |
| Laser Line Color | Blue | | |
| Min. Point Spacing | 70μm | | |
| Stand Off Distance | 170mm ±40mm | | |
| Depth of Field | ±40mm | | |
| Field of View | 110mm x 100mm | | |
| Size and Weight | H 265mm x W 110mm x L 110mm / 1.03kg | | |
| Working range | Up to 50m (using 50m cable) | | |
| Autolock | | | |
| iVision Field of View | 30° (diagonal) | | |
| Acquisition Range | 2m – 40m | | |
| Environmental | | | |
| Operating Temperature | -10°C – 45°C | | |
| Relative Humidity | 10% – 95% (non-condensing) | | |
| Power | | | |
| Power Supply Voltage | 110v/230v ±10% | | |
| Power Consumption | 100w | | |

