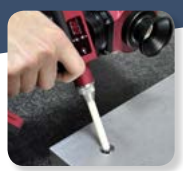
i360

Hand-Held Probing & Scanning





Handheld **flexibility**

The i360 family includes the wireless **iProbe**, and the **iScan II** to fit any unique measurement need or application. In combination with API's Radian laser tracker, these products scan or measures hidden points with greater accuracy than can be obtained with a Spherically Mounted Retroreflector (SMR).

Applications:

- ✓ Part Inspections
- ✓ Cavity Probing
- ✓ Quality Assurance
- ✓ Fixture Inspection
- ✓ Surface Scanning
- ✓ Precision Measuring
- ✓ Reverse Engineering

FEATURES & **BENEFITS**

Accuracy
IFM based precision measurement for use in applications including fixture inspection, gap and flush measurement, contours and reverse engineering

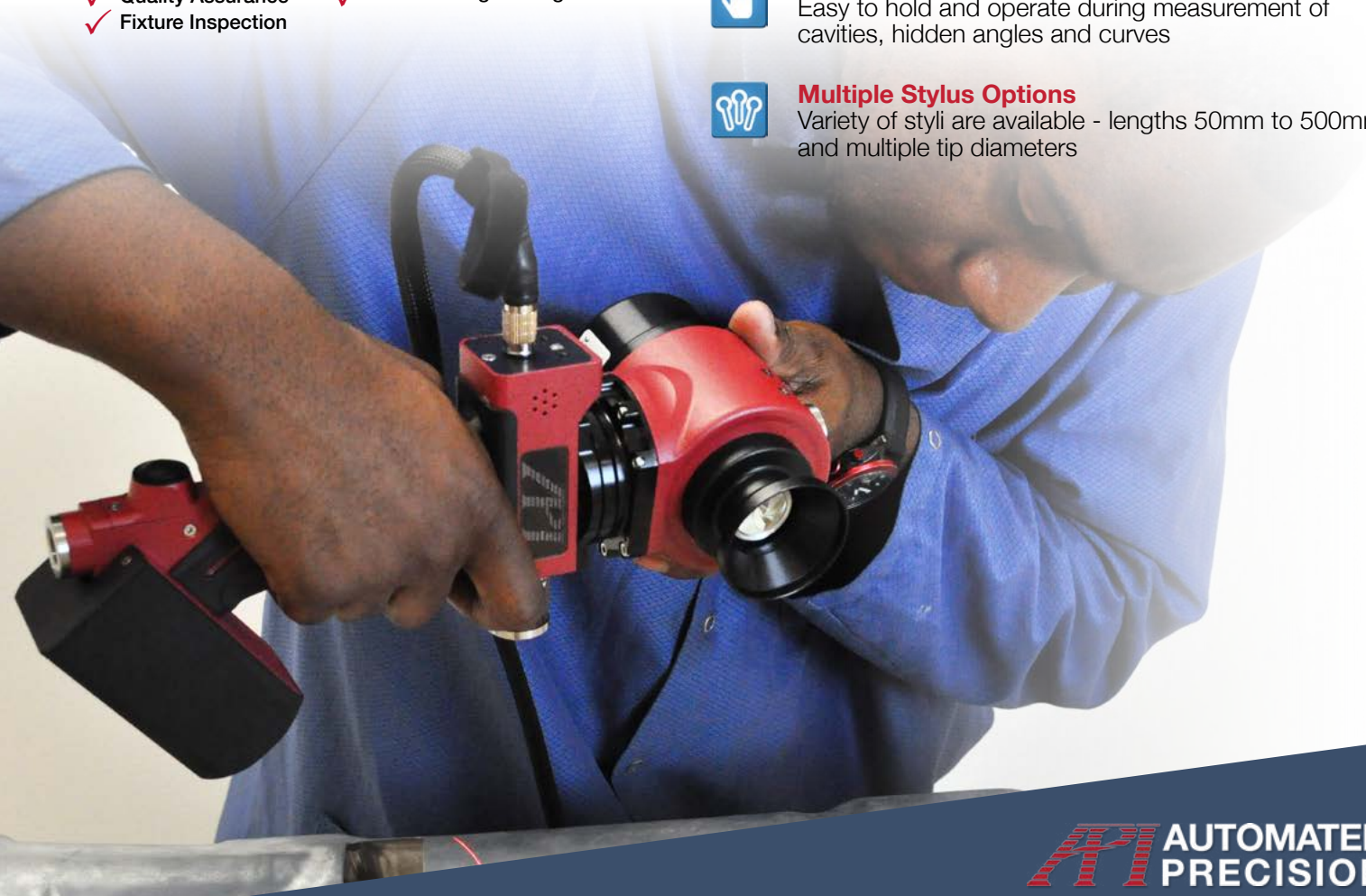
Compact solution
A lightweight probing and non-contact scanning, all in one device that is easy to transport and use

Scanning performance
Capable of scanning difficult surfaces like high gloss or high contrast areas

360º of continuous measurement
i360's swivel head allows for continuous accurate measurement in all orientations without ever breaking contact with Radian laser tracker

Ergonomic design
Easy to hold and operate during measurement of cavities, hidden angles and curves

Multiple Stylus Options
Variety of styli are available - lengths 50mm to 500mm and multiple tip diameters



AUTOMATED PRECISION

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PRODUCT **SPECIFICATIONS**
[Metric Units]

iSCAN II

175mm Stand-off

	7 m	15 m	Above 15 m
Spatial Length (SL^U)	±50 µm	±80 µm	±20 µm + 4 µm/m
Sphere Radius (R^U)	±50 µm	±75 µm	±30 µm + 5 µm/m
Surface (Sr^U)	±100 µm	±110 µm	±80 µm + 2 µm/m

iPROBE

Parameter	Specification
Radial Tracking Distance	40m *(80m with wireless extender)*
Wireless Frequency	2.4 GHz
Weight	1.14 kg (2.5 lbs)
Battery Life *(iProbe configuration)*	6+ working hours

Vertical Probe (Top): 100mm Effective Stand-off (w/ 50mm Stylus)

	7 m	15 m	Above 15 m
3D Points ($3D^U$)	75µm	115µm	40µm + 5µm/m
Spatial Length (SL^U)	45µm	85µm	10µm + 5µm/m
Sphere Radius (R^U)	24µm	38µm	10µm + 2µm/m

Horizontal Probe: 130mm Effective Stand-off (w/ 50mm Stylus)

	7 m	15 m	Above 15 m
3D Points ($3D^U$)	100 µm	140 µm	65 µm + 5 µm/m
Spatial Length (SL^U)	50 µm	90 µm	15 µm + 5 µm/m
Sphere Radius (R^U)	30 µm	45 µm	15 µm + 2 µm/m

Vertical Probe (Bottom): 310mm Effective Stand-off (w/ 50mm Stylus)

	7 m	15 m	Above 15 m
3D Points ($3D^U$)	125 µm	165 µm	90 µm + 5 µm/m
Spatial Length (SL^U)	65 µm	105 µm	30 µm + 5 µm/m
Sphere Radius (R^U)	34 µm	50 µm	20 µm + 2 µm/m

Definitions

3D Points Uncertainty ($3D^U$)
$3D^U$ is the deviation between a point measured with the i360 and the nominal position** of that point

Spatial Length Uncertainty (SL^U)
SL^U is the deviation between a length measured with the i360™ (in a static orientation) and its nominal value.**

Sphere Radius Uncertainty (R^U)
R^U is the deviation between a measured sphere's radius and its nominal value** where the reference sphere has a radius between 10 mm and 50 mm.

Measurement Unit Specification
$3D^U$, SL^U, and R^U are further specified as a function of the distance between the laser tracker and the measured surface.

**These values represent the Maximum Permissible Error (MPE) between a verified Scale Bar and the expected performance of the instrument.*

*** Nominal Values are established by the Laser Tracker*

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