

# LEICA ABSOLUTE TRACKERS

Probing Solutions



Leica Absolute Tracker AT402 and B-Probe

## ENTRY-LEVEL ULTRA-PORTABLE PROBING SYSTEM

The Leica B-Probe is a handheld and battery-powered point probing device made for the Leica Absolute Tracker AT402, Hexagon Metrology's most portable laser tracker. Due to its unique portability, small footprint and wireless operation, it can measure where neither 3D laser trackers nor traditional optical probing systems can reach.



Leica AT402: 160 m radial distance from the sensor



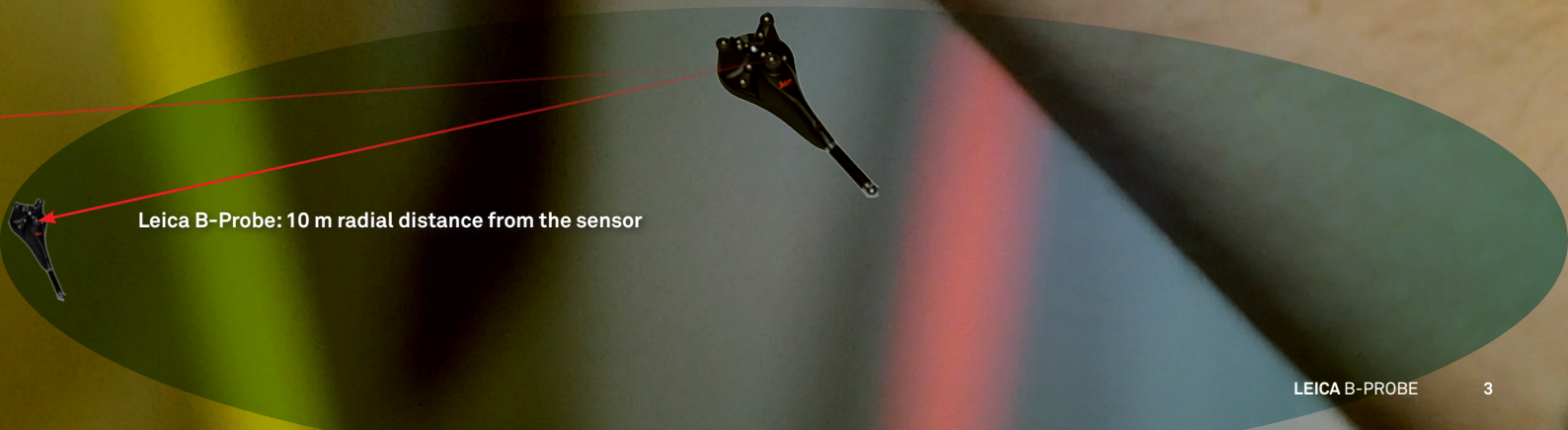


### Hand-Luggage Metrology Solution

Consequent pursuit of portability: the entire laser tracker weighs only 8 kg and fits into a micro-car or a hand luggage bin.

### Size Does Not Matter

The Leica B-Probe can gather hidden 3D points in a measurement volume of 20 m around the Leica Absolute Tracker AT402. With endless telescope rotation, the Leica AT402 covers a full 360° horizontal and a 290° vertical dome. For very large structures that require highly accurate measurements, the volume can be extended with virtually no loss in probing accuracy by completing a laser tracker move station.





Leica Absolute Tracker AT960 and T-Probe

# TOP PERFORMANCE HIGH ACCURACY 6DOF PROBING SYSTEM

Leica T-Probe, the “Walk-Around” armless, wireless solution for probing of hidden, hard-to-reach points in one go with minimal setup times, has become a high-performance industry standard. Thousands of users benefit from a high point-acquisition rate, automatic stylus recognition and individually assignable multi-function buttons.



*High accuracy inspection*



*Customized stylus*



*Automatic stylus recognition*



*Wireless inspection of hidden points*

### **Up to 60 m Working Volume ( $\emptyset$ )**

Together with the Leica Absolute Tracker AT960, the Leica T-Probe creates a flexible top-performance probing solution that delivers real-time output. Small, light, user-friendly and more accurate than any other handheld probe in the world, the Leica T-Probe gives you more than 6 Degrees of Freedom: it gives you the right way to measure. Pairing individual hardware options with applications, the Leica T-Probe remains highly accurate at a measurement volume ( $\emptyset$ ) up to 60m in a single set-up.

### **Laser Scanning and Machine Control Ready**

All Leica Absolute Tracker AT960 6DoF systems can be equipped with the Leica T-Scan 5, a high-speed 3D laser scanner for most challenging applications within 60 m measurement volume ( $\emptyset$ ). Also, the Leica Absolute Tracker AT960 is ready for automated applications, delivering high-speed dynamic output for machine control and guidance.





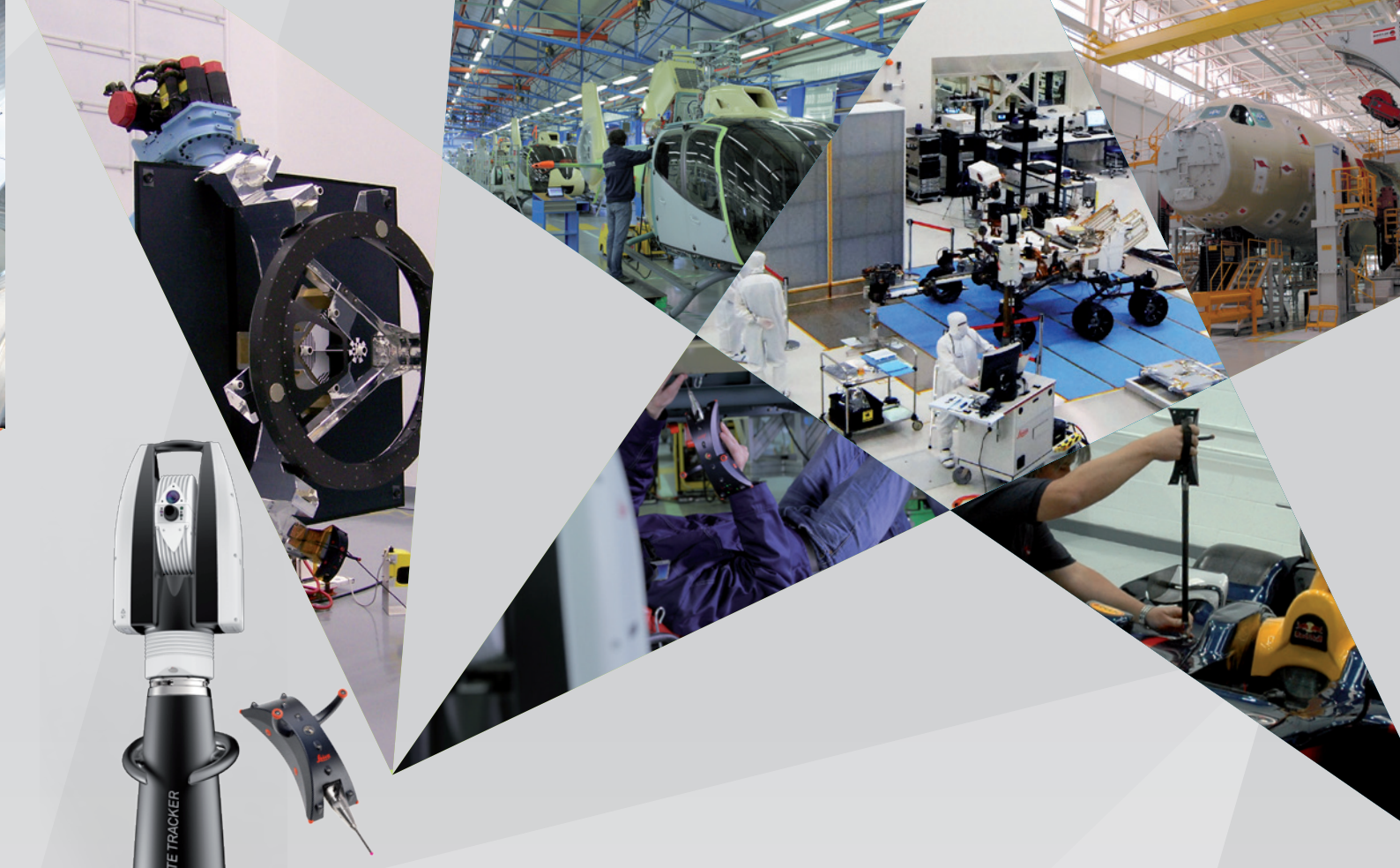


## Leica Absolute Tracker Probing Solutions Compared

	Leica T-Probe	Leica B-Probe
<b>Max. Probing Volume (∅)</b>	60 m	20 m
<b>Relocation Volume (∅)</b>	160 m	320 m
<b>Accuracy <math>U_{xyz}</math></b>	0.035 mm*	0.2 mm
<b>Cableless Operation</b>	✓	✓
<b>Typical Runtime on 1 Battery Charge</b>	12 hours	> 6 hours
<b>Multiple Programmable Buttons</b>	✓	✗
<b>Instant Visibility Feedback</b>	✓	✗
<b>Automatic Stylus Recognition</b>	✓	✗
<b>Multiple Stylus Mounting Positions</b>	✓	✗
<b>Acoustic Feedback</b>	✓	✗

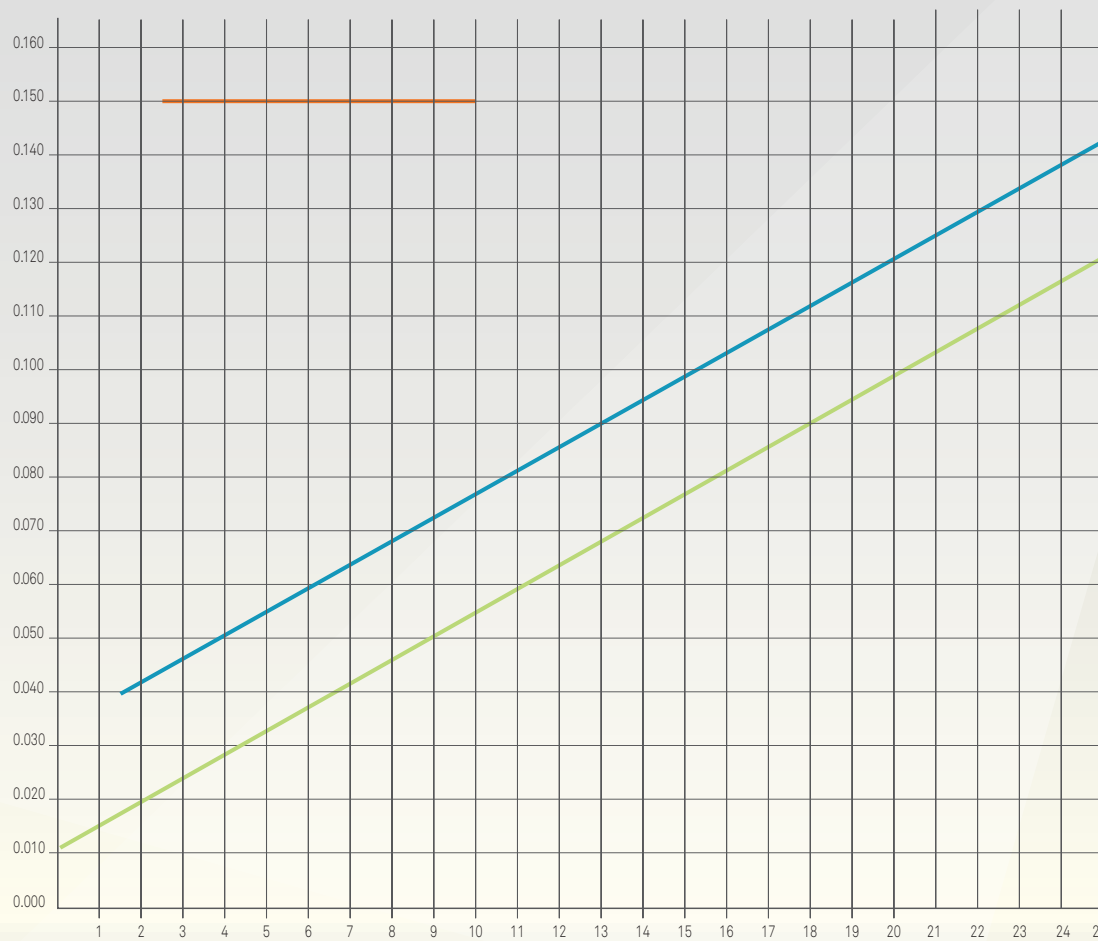
The probing uncertainty " $U_{xyz}$ " is defined as the deviation between a measured coordinate and the nominal coordinate of that point. All specifications are calculated according to the draft ISO 10360-10 standard.

\* Additional T-Probe uncertainty to be added according to ISO/IEC Guide 98-3:2008 to the existing Leica Absolute Tracker AT960 " $U_{xyz}$ " uncertainty for a complete " $U_{xyz}$ " uncertainty.



## Typical Scale Bar Accuracy

Accuracy in mm\*



Leica B-Probe



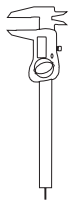
Leica T-Probe



Leica AT960/402

\* Typical accuracy is half the MPE

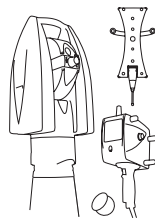
Distance in m



PRECISION MEASURING INSTRUMENTS



PORTABLE MEASURING ARMS



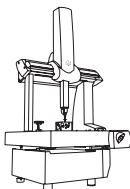
LASER TRACKERS & STATIONS



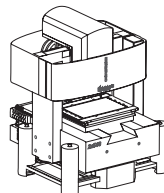
WHITE LIGHT SCANNERS



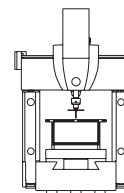
SENSORS



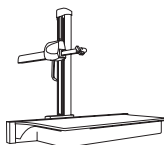
BRIDGE CMMS



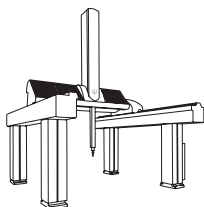
MULTISENSOR & OPTICAL SYSTEMS



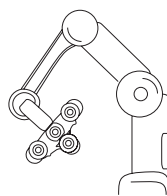
ULTRA HIGH ACCURACY CMMS



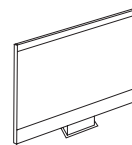
HORIZONTAL ARM CMMS



GANTRY CMMS



AUTOMATED APPLICATIONS



SOFTWARE SOLUTIONS



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Class 2 Laser Product in accordance with the IEC 60825-1, Second Edition (2007-03)