OMNITRAC 2

Wireless Laser Tracker



Rugged **portability**

Omnitrac2 (OT2) wireless laser tracker is the ideal measuring instrument for optimum portability. Its compact size and cordless design makes it possible to measure in confined environments where other systems cannot.

FEATURES & **BENEFITS**

Portability and Flexibility
At less than 11 kg, OT2 can be mounted in any orientation and fits in a small carry-on case.

Fully Integrated Unit
Station moves are faster with OT2. Integrated controller and cableless operation allows the user to operate in more confined spaces without hazard.

On-Board Wireless Technology
Reduce set-up time and eliminate fuss with OT2's integrated WiFi.

Battery Operation
OT2 can measure for up to 5 hours without an AC power source. An external hot-swappable battery can double battery life.

Absolute Distance Measurement (ADM)
OT2 is designed with a high-accuracy and high-speed ADM laser that enables rapid beam re-acquisition.

Autolock
With built-in autolock functionality, the OT2 will quickly recapture a lost beam and permit seamless measurement in confined spaces.

Virtual Level
The high-accuracy internal level establishes a gravity coordinate frame with just one click.

Environmental Compensation
The OT2's onboard weather station ensures accuracy in different operating conditions from -10° C to 45° C.

Service and Support
The Automated Precision global team provides consistent support anywhere in the world.

vProbe's wireless technology syncs perfectly with API's OT2 laser tracker. vProbe makes it easier to operate in your workspace without having to reposition your tracker or fixtures.

AUTOMATED PRECISION

15000 Johns Hopkins Dr. | Rockville, MD 20850 | 1-800-537-2720 | info@apisensor.com | www.apisensor.com

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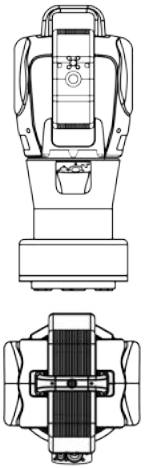
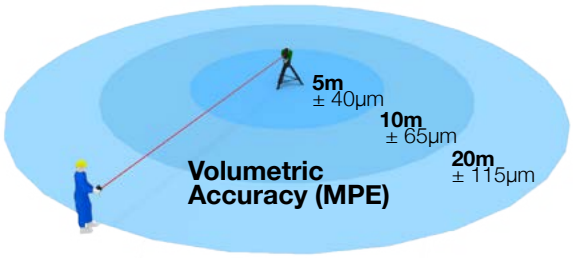
PRODUCT **SPECIFICATIONS**
[Metric Units]





*Measurement of a ScaleBar per ASME B89.4.19-2006
**Specifications are listed in MPE
***Capable of hot-switching with External battery

Laser Safety: Class II (IEC60825-1)

Range of Measurements

Linear Range (Diameter)	50 m (100 m) 80 m (160 m) *optional*
Minimum Measurement Distance	0 m
Azimuth Range	± 320° (640° end to end)
Elevation Range	-59° to 79°
Internal Level Range	± 2°

3D Measurement Performance

Volumetric Accuracy	± 15 µm + 5 µm/m*

Angular Performance

Axial Angular Accuracy	3.5 µm/m**
Maximum Angular Speed	180° / sec
Maximum Angular Acceleration	180° / sec^2
Internal Level Accuracy	± 2 arcseconds

Linear Performance

Accuracy	± 15 µm **or** 0.7 µm/m** *(whichever is greater)*

Autolock Performance

Field of View	30° (diagonal)
Acquisition Range	2 m to 40 m

Environmental

Operating Temperature	-10° C to 45° C
Relative Humidity	10-95% non-condensing
Altitude	-700 m to 3000 m

Dimensions

Tracker Weight	10.9 kg
Tracker Size	198 x 198 x 430 mm

Internal Controller

Battery Operation	5 hours (typical)***
Communication Protocol	Ethernet WiFi 802.11a/b/g/n

In-Line Distance Measurement

Range	MPE
2 to 5 m	0.015 mm
2 to 10 m	0.015 mm
2 to 20 m	0.015 mm
2 to 50 m	0.034 mm
2 to 80 m	0.055 mm

Scale Bar Measurement

Range	MPE
2 m	0.035 mm
5 m	0.057 mm
10 m	0.092 mm
20 m	0.163 mm
50 m	0.375 mm
80 m	0.587 mm

The **ASME B89.4.19-2006 standard** prescribes a series of tests for evaluating the performance of spherical measurement systems. These values represent the Maximum Permissible Error (MPE) between a verified Scale Bar and the expected performance of the instrument.

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