

# 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.

**API** AUTOMATED  
PRECISION

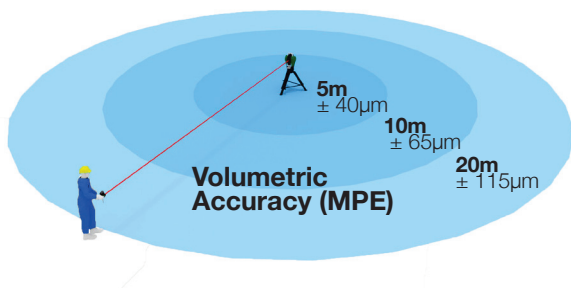
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Automated Precision Europe GmbH | Im Breitspiel 17 | 69126 Heidelberg | +49 (0) 6221 729 805 0 | info.eu@apisensor.com | www.apisensor.com

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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<sup>2</sup>  
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.