## OTZCORE

Wireless Laser Tracker



# Essential portability

**OT2 Core** is a high performance laser tracker that delivers essential laser tracking measurement capability at an affordable price. Its compact size and wireless operation allows the users to apply high accuracy measurement with the convenience of portability and great ease of use.

#### FEATURES & BENEFITS



#### **Portability and Flexibility**

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



#### **Fully Integrated Unit**

Station moves are faster with OT2 Core. 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 Core's integrated WiFi.



#### **Battery Operation**

OT2 Core 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 Core is designed with a high-accuracy and high-speed ADM laser that enables rapid beam reacquisition.



#### Autolock

With built-in autolock functionality, the OT2 Core 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 Core'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.

E-mail:

Ph: +91-9008006149



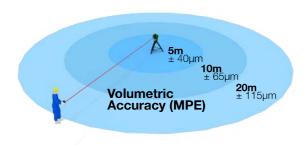
## OT2CORE

Wireless Laser Tracker

#### 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)

Minimum Measurement Distance Azimuth Range Elevation Range Internal Level Range

3D Measurement Performance

Volumetric Accuracy

**Angular Performance** 

Axial Angular Accuracy Maximum Angular Speed Maximum Angular Acceleration Internal Level Accuracy

Linear Performance

Accuracy

**Autolock Performance** 

Field of View Acquisition Range

**Environmental** 

Operating Temperature Relative Humidity Altitude

**Dimensions** 

Tracker Weight Tracker Size

Internal Controller
Battery Operation

Communication Protocol

50 m (100 m)

) m

 $\pm$  320° (640° end to end) -59° to 79°

± 2°

 $\pm 15 \, \mu m + 5 \, \mu m/m^*$ 

3.5 µm/m\*\* 180° / sec 180° / sec<sup>2</sup> ± 2 arcseconds

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

30° (diagonal) 2 m to 40 m

-10° C to 45° C 10-95% non-condensing -700 m to 3000 m

10.9 kg 198 x 198 x 430 mm

5 hours (typical)\*\*\*
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



#### 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



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.



## 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**

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**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.



## OMNITRAC 2

Wireless Laser Tracker

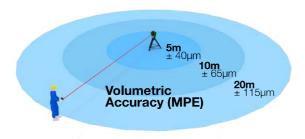
#### PRODUCT SPECIFICATIONS

± 320° (640° end to end)

[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)

Minimum Measurement Distance Azimuth Range

Elevation Range Internal Level Range

#### 3D Measurement Performance

Volumetric Accuracy

 $\pm 15 \, \mu m + 5 \, \mu m/m^*$ 

#### Angular Performance

Axial Angular Accuracy Maximum Angular Speed Maximum Angular Acceleration Internal Level Accuracy

3.5 µm/m\*\* 180° / sec 180° / sec² ± 2 arcseconds

50 m (100 m) 80 m (160 m) optional

-59° to 79°

#### **Linear Performance**

Accuracy

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

#### Autolock Performance

Field of View Acquisition Range

#### **Environmental**

Operating Temperature Relative Humidity Altitude

-700 m to 3000 m

30° (diagonal) 2 m to 40 m

-10° C to 45° C

#### **Dimensions**

Tracker Weight Tracker Size

10.9 kg 198 x 198 x 430 mm

10-95% non-condensing

#### Internal Controller

**Battery Operation** Communication Protocol 5 hours (typical)\*\*\* 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.



## RADIAN

Smallest IFM+ADM Laser Tracker



## Smart 3D/6D measurement

Combining on-board intelligence with durability and accuracy the **Radian** excels at delivering the most accurate and reliable measurements possible in advanced applications.

#### FEATURES & BENEFITS



#### Portability and Flexibility

At less than 9 kg, the Radian sensor can be mounted in any orientation and weighs less than 21 kg fully packed.



#### Interferometer (IFM) Technology

Built-in Interferometer (IFM) provides unparalleled distance measurement precision as an on-board dimensional reference.



#### **Absolute Distance Measurement (ADM)**

High-speed ADM laser supplements the IFM for rapid beam reacquisition with no minimum measurement distance.



#### **6DoF and Target Solutions**

Radian interfaces with a range of targeting options including 6 Degree of Freedom (6DoF) Active Target, touch probes, and volumetric scanners.



#### **iVision Video Detection**

The iVision camera features video streaming and capture for remote monitoring of measurements and documenting the inspection process.



#### **iVision Autolock Capability**

iVision offers Manual, Single, or Multi-Selection target lock-on modes for automated measurement processes.



#### **Virtual Level**

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



#### **Environmental Compensation**

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



#### Service and Support

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E-mail:

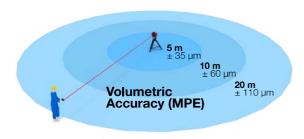
## RADIAN

Smallest IFM+ADM Laser Tracker

PRODUCT SPECIFICATIONS

[Metric Units]





\*Measurement of a ScaleBar per ASME B89.4.19-2006

\*\*Specifications are listed in MPE

Laser Safety: Class II (IEC60825-1)

#### Range of Measurements

50 m (100 m) 80 m (160 m) optional Linear Range (Diameter) 20 m (40 m) optional

Minimum Measurement Distance Azimuth Range Elevation Range Internal Level Kange

± 320° (640° end to end)

-59° to 79° ± 2°

#### 3D Measurement Performance

Volumetric Accuracy (IFM)  $\pm 10 \, \mu m + 5 \, \mu m/m^*$ 

#### **Angular Performance**

3.5 µm/m\*\* 180° / sec 180° / sec² Axial Angular Accuracy Maximum Angular Speed Maximum Angular Acceleration Internal Level Accuracy ± 2 arcseconds

#### **Linear Performance**

IFM Accuracy  $\pm 0.5 \, \mu m/m^{**}$ ADM (Lock-on) Accuracy  $\pm 10 \, \mu m$  or 0.7  $\mu m/m^{**}$ (whichever is greater)

#### **I-Vision Performance**

30° (diagonal) Field of View Acquisition Range 2 m up 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 Tracker Size Controller Weight Controller Size

9 kg 177 x 177 x 355 mm 3.2 kg

110 x 160 x 310 mm

#### Controller

Communication Protocol Ethernet

E-mail:

Ph: +91-9008006149

#### In-Line Distance Measurement

Range	MPE	1
2 to 5 m	0.002 mm	
2 to 10 m	0.004 mm	٥
2 to 20 m	0.009 mm	`
2 to 50 m	0.024 mm	
2 to 80 m	0.039 mm	



#### Scale Bar Measurement

Range	MPE
2 m	0.028 mm
5 m	0.049 mm
10 m	0.085 mm
20 m	0.156 mm
50 m	0.368 mm
80 m	0.580 mm
50 m	0.368 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.

