# Leica Absolute Tracker AT960

## Key features

**Overview camera**
High-resolution display with live view and multiple zoom levels with no reduction in image quality

**PowerLock**
Interrupted line of sight automatically re-established with no user interaction

**Multifunctionality**
Compatible with:

> reflectors and Leica T-Probe for single-point measurement

> AS1, LAS and LAS-XL scanners for non-contact measurement

> automated robotic installations

**Real-time data output**
1000 Hz low-latency Ethercat data transfer with the optional Real-Time Feature Pack

**Hot-swappable battery power**
Quick and easy cable-free setup in almost any location

**Orient-to-gravity function**
Allows for measurement with the Z-axis aligned to gravity – ideal for levelling and alignment tasks

**Built-in WiFi**
For simple set up and communication with the PC and remote control operation

**Large volume**
Measure within a volume up to 160 metres in diameter

**IP54 protection**
IEC-certified sealed unit guarantees ingress protection against dust and other contaminants

**ISO certification**
System traceability certified in line with ISO 17025

**Real-time remote monitoring**
Compatibility with HxGN SFx | Asset Management, the leading solution for of Industry 4.0 asset performance management

**GPS location service**
Possibility to track location of the Absolute Tracker anywhere in the world, even when it is switched off.

# Leica Absolute Tracker AT960

## Key features for benchmarking

**Does the laser tracker deliver the following benefits?**

| | | AT960 | Other tracker |
|---|---|---|---|
| General | Can it lock onto a target with just 10 microns of uncertainty at any distance within range? | ✓ | |
| | Can it measure a reflector from a distance of up to 80 m away? | ✓ | |
| | Is it IP54 certified to ensure system protection in harsh environments and minimise downtime? | ✓ | |
| | Is the laser tracker compatible with multiple types of accessories such as probes, scanners, automation add-ons? | ✓ | |
| | Can the tracker be used in non-conventional orientations (upside down or tilted) while using probes or scanners? | ✓ | |
| | Does it have an internal levelling sensor accurate to within just ±1 arcsec? | ✓ | |
| | Is it possible to get information such as connection status, environmental data and usage statistics and even get immediately notified if an event happens? | ✓ | |
| | Is the system compatible with the standard metrology packages on the market? | ✓ | |
| | Can the tracker be located using GPS signal all over the world, even when the tracker is switched off? | ✓ | |
| Portability | Does it support WiFi connectivity? | ✓ | |
| | Has the system gone through a drop test proving that it will remain fully functional if submitted to a hard shock such as may happen during transportation? | ✓ | |
| | Can it operate on battery power for more than 6 hours? | ✓ | |
| | Can the batteries be hot-swapped, allowing for longer operation without switching off the instrument? | ✓ | |
| Probing | Does the probe automatically recognise the stylus, avoiding operator errors due to incorrect selections? | ✓ | |
| | Does the probe ensure the repeatability of the mounting, saving time by eliminating the need for recalibration? | ✓ | |
| | Does the probe have wide working angles (± 45°) and function at any rotation angle, independent from the orientation of the laser tracker? | ✓ | |
| | Does the probe have multiple buttons that can assign different functions (accept point, reject point, next point, etc.)? | ✓ | |
| | Does the probe have audible and visual feedback? | ✓ | |
| | Does the probe support long extensions, bigger than 600 mm, that allow it to reach hidden points? | ✓ | |
| | Is the probe free of time-consuming connection tasks such as pairing the probe to tracker? | ✓ | |
| | Is the probe so accurate that it can measure a scale bar at 5 meters to within 80 microns? | ✓ | |
| Scanning | Is the laser tracker compatible with a laser scanner? | ✓ | |
| | Is it possible to use a laser scanner that allows the user to scan multiple colours and materials in a single pass? | ✓ | |
| | Is it possible to use a laser scanner that can be both handheld and mounted within robotic installations? | ✓ | |
| | Can the laser scanner scan objects without spraying or applying targets to the part? | ✓ | |
| | Is the scanner so accurate that it can measure a scale-bar to within 50 microns up to 30 metres from the tracker? | ✓ | |
| | Is it possible to scan very large parts with only one instrument because it is easy to move around the measurement object? | ✓ | |
| | Is the scanner certified according to ISO 10360-10? | ✓ | |
| | Can the same laser scanner be used with an Arm (for areas of difficult access) and with a laser tracker for large volume scanning? | ✓ | |
| | Can the laser scanner acquire up to 1.2 million points/s for a very productive scanning job? | ✓ | |
| Automation | Can the system inspect parts automatically and accurately, independent from robot accuracy performance? | ✓ | |
| | Does the system offer a fully integrated hybrid automation solution combining high-speed scanning of surfaces and features with probing hidden points? | ✓ | |
| | Can the system work both manually and automatically using the same software interface without affecting accuracy performance? | ✓ | |
| | Can the system be used for inline measurements that require inspection without part preparation or the need for special fixtures? | ✓ | |
| Certification and service | Does it come with ISO 17025 certification to ensure the traceability of the calibration process? | ✓ | |
| | Does it come with a 2-year factory warranty as standard? | ✓ | |
| | Does it have 10 years of guaranteed serviceability, allowing more time to plan for a replacement? | ✓ | |
| | Is the product specified according to ISO 10360-10? | ✓ | |
| | Does the supplier have service centres spread all over the world to minimise shipment costs, avoid customs bureaucracy and provide top-quality service in a local language? | ✓ | |

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