

LEICA ABSOLUTE TRACKER AT403

ABSOLUTE PRODUCTIVITY | PORTABILITY | RESILIENCE



ABSOLUTELY ANYTHING ABSOLUTELY ANYWHERE

THE WORLD'S MOST PORTABLE LASER TRACKER

Portable measurement has never been this easy. An all-in-one metrology solution more portable than any other on the market, the Leica Absolute Tracker AT403 from Hexagon Manufacturing Intelligence is a self-contained measurement workshop inside a single compact and convenient case.

With outperforming measurement process speed, operational simplicity like no other laser tracker and an unmatched level of robust construction, the Leica Absolute Tracker AT403 is a calculated bundle of affordable innovation without equal on the portable measurement market.

Measure absolutely anything, absolutely anywhere, straight out of the box, with the Leica Absolute Tracker AT403.



Productivity

Measurement practice made faster and more efficient than ever before.



Portability

The most portable laser tracker measurement system ever produced.



Resilience

Designed for everywhere means comprehensive usability anywhere.



DRIVING PRODUCTIVITY

THE FAST-TRACK TO IMPROVED EFFICIENCY

The Leica Absolute Tracker AT403 is made for getting things done efficiently, affordably and accurately. With minimal measurement process times, this is a laser tracker solution that puts **productivity first**.

Faster and more economical **stationary and continuous measurement** processes have been paired with a streamlined station change procedure to deliver key time-saving and functionality improvements. Going further, innovative **WiFi access point** connectivity and **hot-swappable batteries** offer the freedom needed to make the entire process of taking measurements **more efficient** than ever before.



Targeting Technology

With Hexagon's innovative **PowerLock** active vision technology, accurate measurement is effortless. This automatic beam-targeting system makes laser tracker operations simple and intuitive, reducing training needs and delivering even faster measurement results.



MEASUREMENT ON THE GO

THE METROLOGY SOLUTION IN A CARRY-ON CASE

The Leica Absolute Tracker AT403 represents coordinate measurement machine functionality made truly portable. The full probing system is compactly arranged within a **single lightweight case** and ready for full operation straight out of the box. This is a laser tracker solution designed for speed and ease of use wherever and whenever.

Supported by easy and innovative **WiFi connectivity** and independent **battery-powered operation**, the Leica Absolute Tracker AT403 is the definition of portable wireless technology. A uniquely **all-in-one** measurement solution, it's designed to go anywhere that accurate measurement is needed.



Portable Probing

The **Leica B-Probe** handheld point-probing tool is a perfect match for the Leica Absolute Tracker AT403. Uniquely portable and usable, it delivers accurate measurement where neither 3D laser trackers nor traditional optical probing systems can reach. Capable of gathering hidden 3D point data within large measurement volumes, the battery-powered cableless operation possibilities of the Leica B-Probe make it a unique proposition in the world of large-volume 3D metrology.

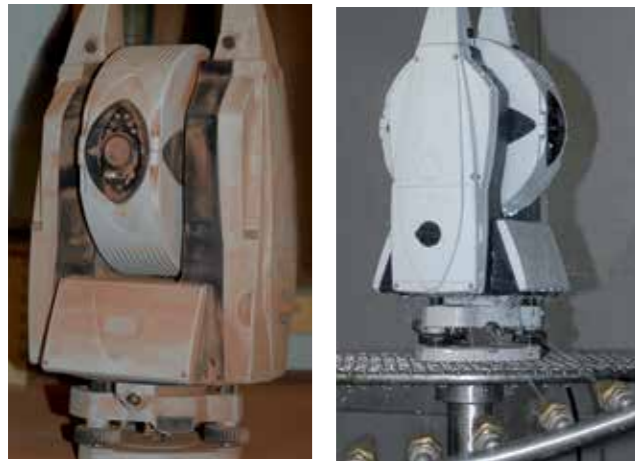
With the Leica Absolute Tracker AT403, Leica B-Probe performance has been enhanced, with faster measurement speed, customisable hidden-point capability and improved usability.

ON TARGET ANYWHERE

RELIABLE MEASUREMENT IN ANY ENVIRONMENT

The Leica Absolute Tracker AT403 has been designed for leading results in almost any imaginable measurement environment. With a measurement volume of up to **320 metres (ø)**, this is a laser tracker with scale in mind.

Rated for operation in temperatures ranging from -15 to 45 degrees Celsius, the Leica Absolute Tracker AT403 is ready for measurement anywhere - as at home in the harshest outdoor locations as it is on a climate-controlled factory floor. Features such as built-in **MeteoStation** environmental monitoring, **orient-to-gravity** functionality and construction in line with the rigorous **IP54 certification** standard make this level of go-anywhere performance possible, delivering the perfect tool for out-of-bounds measurement.



Outdoor Alignment

With the unique **RapidSight** targeting feature, aligning for long-distance measurement in blinding outdoor conditions is now more a pleasure than a chore. This top-mounted crosshair scope makes difficult targeting a thing of the past, speeding up measurement process times in challenging situations where getting the job done fast is paramount.

LEICA ABSOLUTE TRACKER AT403

DEFINING FEATURES

Encompassing speed, productivity and reliability, the Leica Absolute Tracker AT403 is an unrivalled solution for the challenges of large-volume measurement. Built on a platform of advanced technologies, the system incorporates a range of new and established functions essential for industrial metrology applications.

ABSOLUTE PRODUCTIVITY



PowerLock

Automatically re-establishes interrupted line of sight within a wide degree field of view with no user interaction required.



Continuous Measurement

Continuous time and distance measurement mode.



Battery Power

Independent hot-swappable battery power supply allows for quick and easy cable-free setup and all-day wireless operation.



Orient-to-Gravity

Enables measurement with the Z-axis aligned to gravity, ideal for levelling and alignment tasks.



Entry-Level Probing

Cableless, battery-powered Leica B-Probe with customisable hidden-point capability.

ABSOLUTE PORTABILITY



All-in-One Integrated Design

From integrated wireless connectivity, environmental monitoring and all-day battery power, to overview camera, RapidSight aim scope and ergonomic carry handle, every need is built in.



Single-Box Probing System

Just one case contains the lightest and most portable sensor and probe as well as IR remote, with various transportation cases for full flexibility.



Smart Connectivity

Built-in WiFi with true access point functionality delivers single-user operation through simple PC setup and remote control options via laptops, tablets or smartphones.

ABSOLUTE RESILIENCE



IP54 Certification

The IEC-certified sealed unit guarantees ingress protection against dust and other contaminants, enabling effective measurement in even the harshest environments.



MeteoStation

Integrated environmental unit monitors conditions including temperature, pressure and humidity to compensate for changes and ensure accurate measurements regardless of external factors.



Operating Temperature

Wide operating temperature range of -15 to 45 degrees Celsius.



Measurement Volume

Ultra-large measurement volume of up to 320 metres (ø), with minimum measurement distance less than 0.8 metres.



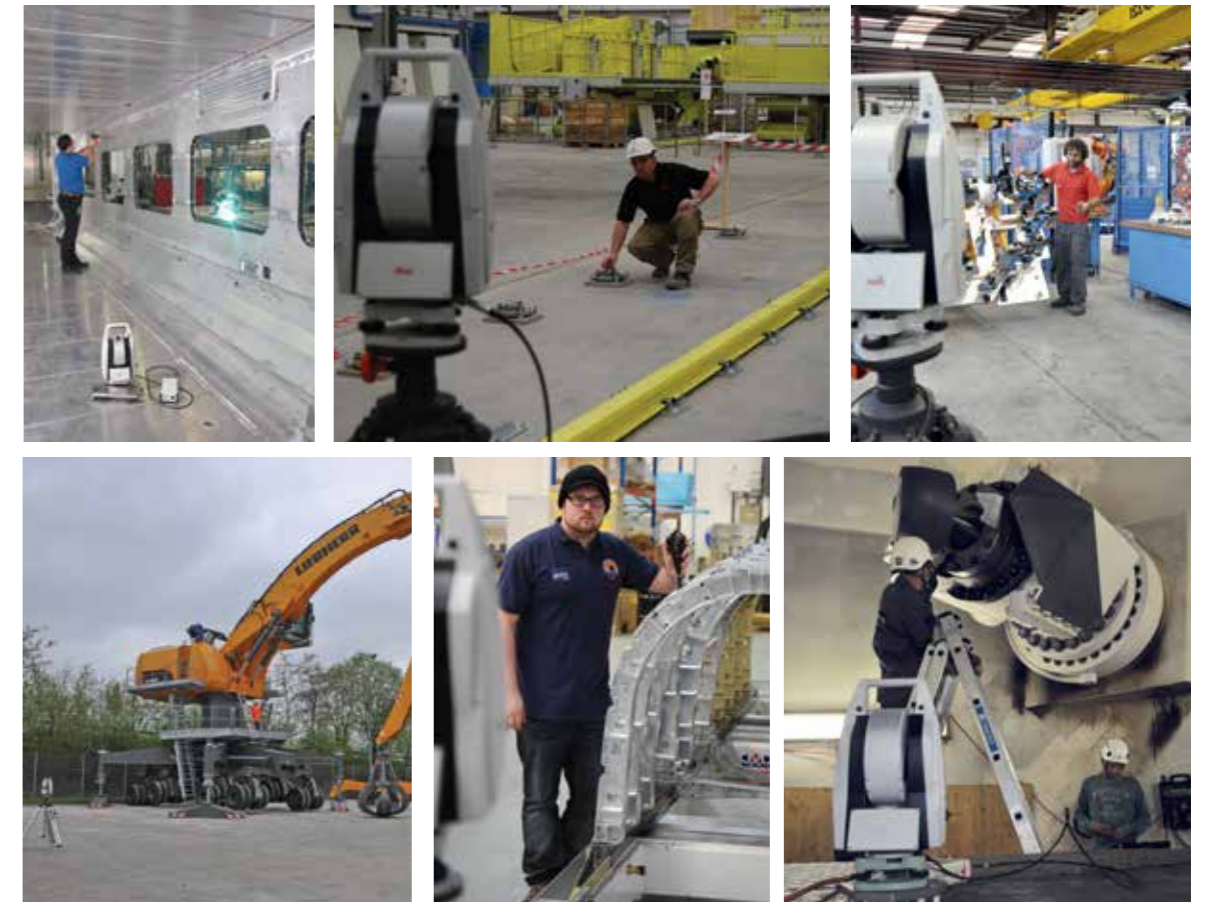
Hexagon Guarantee

Full 24-month factory warranty and guaranteed ten years of serviceability.

READY FOR ANYTHING

MEASUREMENT FOR EVERY APPLICATION

The Leica Absolute Tracker AT403 is the ideal tool for applications across a wide range of industries, from the world's largest infrastructure projects to leading scientific research.



ACCESSORIES

MAKING THE MOST OF MEASUREMENT

The Leica Absolute Tracker AT403 is compatible with a wide range of tools and accessories designed to boost measurement functionality and productivity.



LEICA B-PROBE

The ultimate tool for portable probing measurement functions, the Leica B-Probe is an ultra-portable, battery-operated, wireless handheld probing tool that pairs perfectly with the Leica Absolute Tracker AT403.

LEICA B-PROBE ACCESSORIES



REFLECTORS



ROLLER ALIGNMENT KIT



MOUNTING OPTIONS



SPECIFICATIONS

Accuracy

Reflector* $U_{(x,y,z)} = \pm 15 \mu\text{m} + 6 \mu\text{m}/\text{m}$
($\pm 0.0006'' + 0.000072''/\text{ft}$)

Leica B-Probe* $U_{(x,y,z)} = \pm 0.2\text{mm} (\pm 0.008'')$

*All accuracies specified as Maximum Permissible Errors (MPE) and calculated per ASME B89.4.19-2006 and ISO10360-10:2016 using precision Leica 1.5" Red Ring Reflectors unless otherwise noted.

Absolute Distance Performance $\pm 10 \mu\text{m} (\pm 0.00039'')$

Absolute Angular Performance $\pm 15 \mu\text{m} + 6 \mu\text{m}/\text{m}$
(including Orient-to-Gravity) ($\pm 0.0006'' + 0.000072''/\text{ft}$)

Environmental

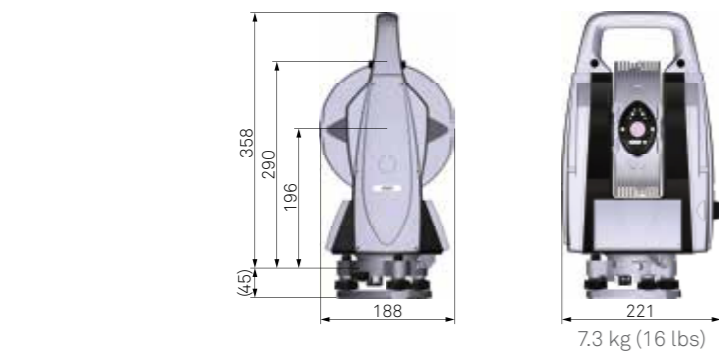
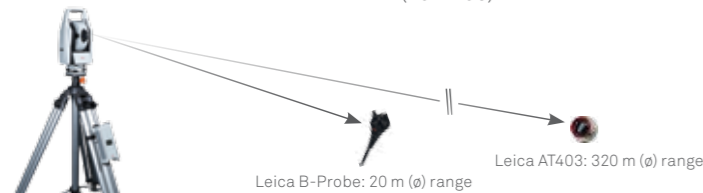
Dust/Water IP54 (IEC 60529)

Operating Temperature -15°C to $+45^{\circ}\text{C}$

Relative Humidity max. 95%
(non-condensing)

Environmental Monitor Temperature, pressure and humidity

Laser Safety Class 2 Laser Product in accordance with the IEC 60825-1 Second Edition (2014-05)



Range

Typical Reflector Measurement 320 m

Volume (ø)

Minimum Reflector Measurement < 0.8 m

Distance

Interface

Cable TCP/IP (Cat5)

Wireless WLAN (IEEE 802.11n)

Power Management

Internal Lithium-ion battery with 8-hour typical runtime

External AC power supply

Optional Power over Ethernet (PoE+)

General Information

Overview Camera 4:3 IR enhanced Image

$\approx 10^{\circ}$ FOV

Remote Control 4-button infra-red
Leica B-Probe

Leica B-Probe

Measurement Volume (ø) 20 m

Relocation Volume (ø) up to 320 m

Minimum Measurement Distance 2.5 m

Dust/Water IP50

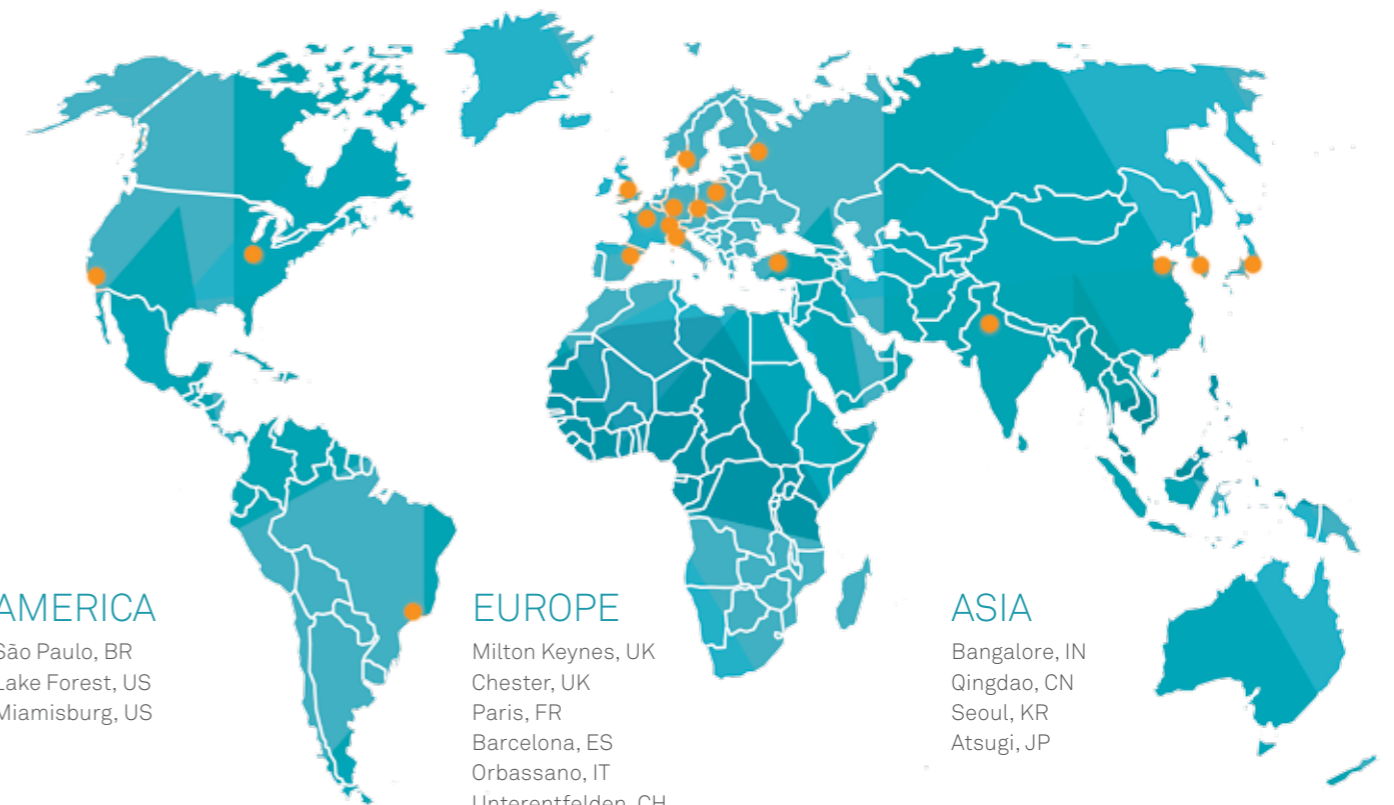
QUALITY ACROSS THE GLOBE

LEADING TOOLS WITH LEADING SUPPORT

Drawing on over 25 years of research and development, the Leica Absolute Tracker AT403 is the latest in a long line of outperforming technological innovations from Hexagon Manufacturing Intelligence. Deriving quality from experience to drive productivity is what keeps Hexagon in front and able to deliver for industries around the world.

The international presence of Hexagon guarantees comprehensive aftersales support and services across the globe. With the largest dedicated service team of any metrology equipment manufacturer and an emphasis on locally delivered solutions, Hexagon is unmatched from service, repair, certification and calibration through operator training and software maintenance and upgrades.

And with the Leica Absolute Tracker AT403, along with the assurance of **ten years of serviceability**, customers will benefit from a new **24-month warranty** – our guarantee that our technology will always meet the needs of our users.



AMERICA

São Paulo, BR
Lake Forest, US
Miamisburg, US

EUROPE

Milton Keynes, UK
Chester, UK
Paris, FR
Barcelona, ES
Orbassano, IT
Unterentfelden, CH
Gothenburg, SE
St. Petersburg, RU
Wetzlar, DE
Prague, CZ
Ankara, TR
Krakow, PL

ASIA

Bangalore, IN
Qingdao, CN
Seoul, KR
Atsugi, JP



Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.

Through a network of local service centres, production facilities and commercial operations across five continents, we are shaping smart change in manufacturing to build a world where quality drives productivity. For more information, visit HexagonMI.com.

Hexagon Manufacturing Intelligence is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity across geospatial and industrial enterprise applications.

-  COORDINATE MEASURING MACHINES
-  3D LASER SCANNING
-  SENSORS
-  PORTABLE MEASURING ARMS
-  SERVICES
-  LASER TRACKERS & STATIONS
-  MULTISENSOR & OPTICAL SYSTEMS
-  WHITE LIGHT SCANNERS
-  METROLOGY SOFTWARE SOLUTIONS
-  CAD / CAM
-  STATISTICAL PROCESS CONTROL
-  AUTOMATED APPLICATIONS
-  MICROMETERS, CALIPERS AND GAUGES