

Leica DISTO™

The original laser distance meter



 **SWISS** Technology
by Leica Geosystems

- when it has to be **right**

Leica
Geosystems

Our promise – Innovation by tradition



With almost 200 years experience, Leica Geosystems is the pioneer in the development and production of state-of-the-art surveying solutions. Our highly motivated development specialists use their strong innovative spirit to bring new ideas to reality. The resulting products impress with their accuracy, reliability and robustness. That's why industry professionals trust Leica Geosystems.

From professionals for professionals

In addition to comprehensive technical knowledge, thinking holistically about the needs and requirements of our customers has the highest priority at Leica Geosystems. Close cooperation with practical professionals leads to user-friendly products that fulfil the customers' expectations perfectly.

"Swiss Technology" creates confidence

To ensure our instruments meet the highest requirements for precision and quality, we operate worldwide in state-of-the-art production centres where Swiss precision goes hand in hand with extraordinary craftsmanship and cutting-edge technology. Continuous extensive tests at all stages of development and production guarantee a consistently high standard of quality.



Close cooperation with professional users.



Highly motivated development specialists realise new ideas.



Continuous testing guarantees consistently high quality.



Products that impress through accuracy, reliability and robustness.

Which Leica DISTO™ is the right one for me?



Functions	D210	X310	D3a BT	D5	D8
Distance measurement	up to 80m	up to 80m	up to 100m	up to 200m	up to 200m
Minimum/maximum measurement	●	●	●	●	●
Area measurement	●	●	●	●	●
Volume measurement	●	●	●	●	●
Triangle function	○	●	●	●	●
Room angle function	○	●	●	●	●
Painter function	●	●	●	●	●
Trapezium measurements	○	○	○	●	●
Pythagoras functions	●	●	●	●	●
Tilt measurement	○	360°	±45°	±45°	360°
Smart Horizontal Mode™	○	●	●	●	●
Double tilt measurement	○	○	○	○	●
Height tracking	○	●	○	○	●
Height profile measurements	○	○	○	○	●
Stake out function	a/a	a/b	a/b	a/b	a/b
Subtraction/addition	●	●	●	●	●
Digital Pointfinder	○	○	○	●	●
Timer	○	●	●	●	●
Multifunctional end-piece	●	●	●	●	●
Bluetooth®	○	○	●	○	●

Measuring with the Leica DISTO™

Simple, quick and accurate

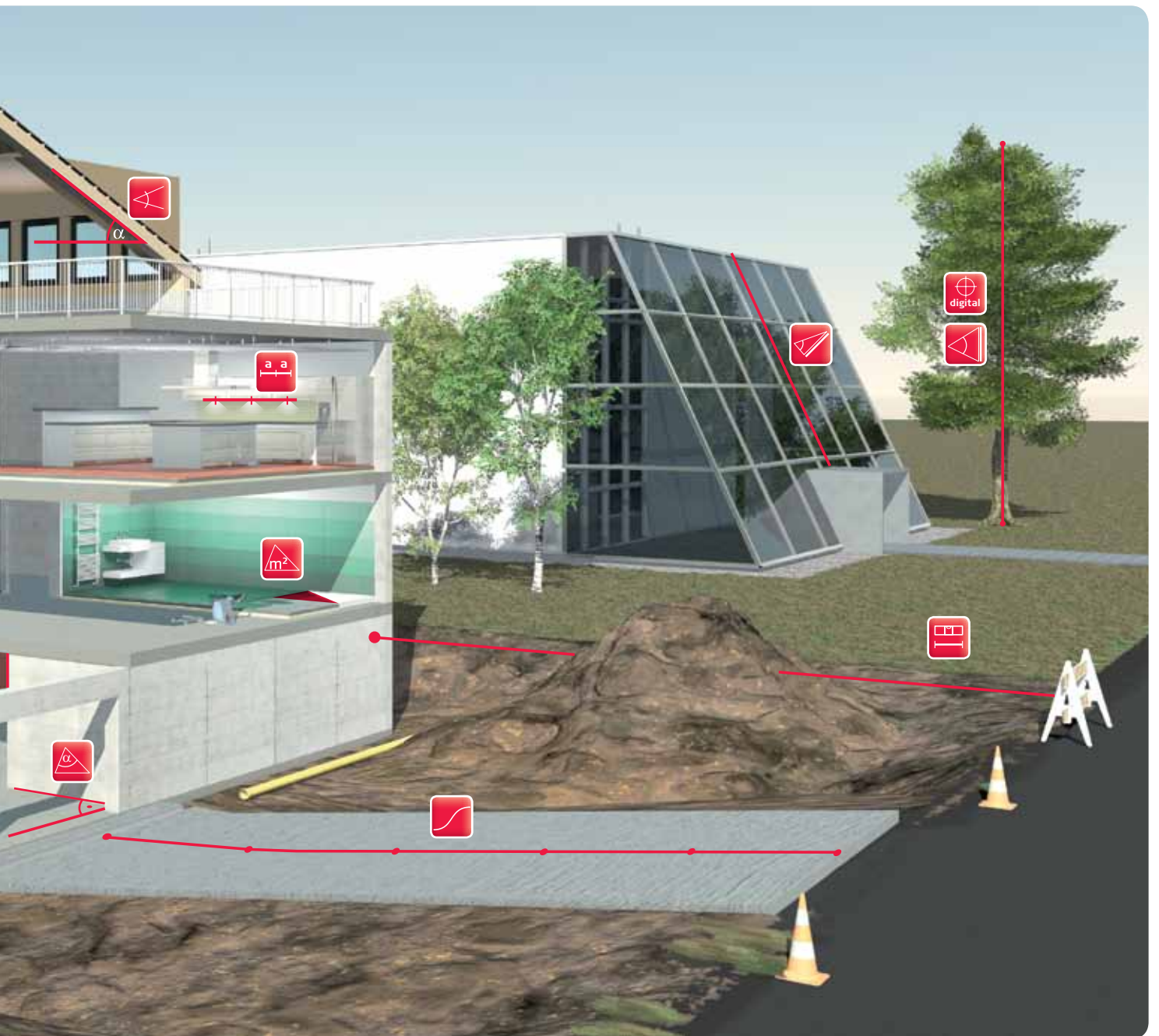


Quick and efficient

Measure distances at the touch of a button, in just a few seconds! Saving you time and money.

Precise and reliable

Measure distances to millimetre accuracy! The laser technology makes it possible.



Versatile and functional

The perfect solution for every measuring situation. With more flexibility for you.

Safe and modern

Avoid dangerous measuring situations at work. Use today's modern technology.

Made-to-measure precision inspires professionals

At the touch of a button, Leica DISTO™ provides precise measurement data quickly and reliably, even from inaccessible places saving enormous amounts of time and money.

Modern measurement – with Leica technology

More than 15 years ago Leica Geosystems brought out the first hand-held laser distance meter and revolutionised the world market. Since then we have set the standards for productivity in modern measuring.



Multifunctional end-piece

Measuring from edges or corners – with the flip-out end-piece you are equipped for any measurement situation. The integrated sensor automatically recognises the correct reference point. Expensive measurement errors are therefore prevented.



Integrated tilt sensor

The combination of distance meter and tilt sensor allows the user to take indirect measurements of distance and heights much more accurately than with conventional measuring methods.



Digital Pointfinder and colour display

The digital Pointfinder with 4x zoom and the large 2.4" colour display makes targeting easier over long distances. The high resolution screen ensures a crystal-clear image, allowing you to measure perfectly, even in bright sunlight.



Bluetooth®

Integrated Bluetooth® technology transfers measurement results wirelessly and without typing errors to pocket PCs or PCs. There you can process your data in Excel®, Word®, AutoCAD® and other programs without delay.

Leica DISTO™

Top performance whatever the conditions



The Leica DISTO™ provides you the right function for every application. Versatil and robust, they match their daily tasks.

The right one for every job



DISTO™ D210
Simple functional

■ **Precision at the touch of a button**

For everything you need to be accurate – the Leica DISTO™ D210 measures with an accuracy of $\pm 1.0\text{mm}$.

■ **Small and handy**

Thanks to its ergonomic and compact design with soft grip, the Leica DISTO™ D210 fits securely in your hand, is light-weight and fits into any pocket.

■ **Multifunctional end-piece**

Whether measuring out of corners, slots or from edges, with this end-piece you are prepared for all measuring situations. The instrument detects the end-piece automatically, which helps you avoid expensive measuring errors.



DISTO™ X310
Robust multifunctionality

■ **Robust**

The precision measurement module is protected by solid rubber. The Leica DISTO™ X310 is therefore particularly resistant. Passes drop tests from up to 2 m height.

■ **Protection class IP65**

The housing and keypad are specially sealed against water jets and dust. Cleaning under running water is no problem.

■ **Tilt sensor 360°**

Thanks to the combination of distance and tilt measurements, you can determine the horizontal distance absolutely precisely and simply – even over obstructions. With the help of the tilt sensor, you can also determine indirect heights.



DISTO™ D3a BT
Transferable multifunctionality

■ **Error-free data transfer**

You can transfer your measurement data directly to your PC with the integrated Bluetooth® technology and avoid expensive typing errors.

■ **Navigation keys**

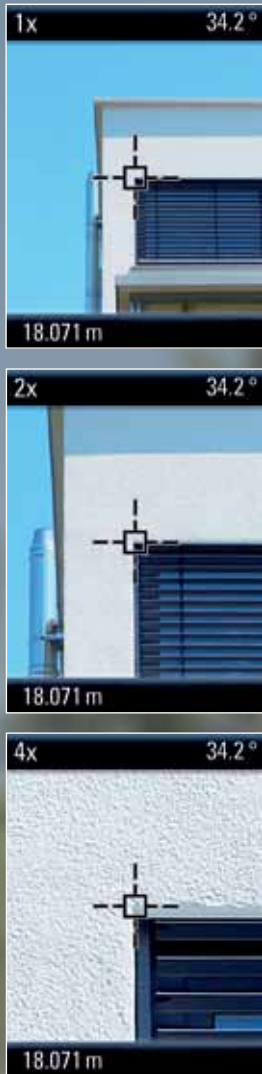
Using the navigation keys on the DISTO™ you can control the movements of the cursor on your Pocket PC or PC.

■ **Free software**

The data transfer software "Leica DISTO™ Transfer" is included – simple to install and with automatic updates.



The world's first Colour display and digital Pointfinder



Two with vision

Ideal for greater distances



DISTO™ D5

Perfect outdoor functionality



Bluetooth®

DISTO™ D8

Versatile multifunctionality

Quickly and easily, the digital Pointfinder with 4x zoom targets distant objects and works well in bright sunlight. Even if the laser dot cannot be seen with the naked eye, the target appears clearly on the 2.4" high-resolution colour display.

Distance measurements are absolutely precise over long distances.

■ **Easy to read**

Measurement results and supplementary information are comprehensively shown on the large colour display. The high image resolution provides a clear, sharp picture in the digital Pointfinder.

■ **Integrated tilt sensor**

Using the tilt sensor, you can also take indirect measurements and the horizontal distance can be determined.

■ **Diverse uses**

Thanks to the variety of different calculation functions, the Leica DISTO™ D5 can solve almost any measurement situation – simple, quickly and precisely. Additional information is available at a touch of a button, such as room volume or angle information.

■ **360° tilt sensor**

The combination of tilt and distance measurements allows you to determine distances where conventional methods fail. The Leica DISTO™ D8 is even capable of simple levelling tasks, digitally and without the aid of a second person.

■ **Error-free data transfer**

Bluetooth® and the supplied "Leica DISTO™ Transfer" software ensure that data transfer to pocket PCs and PCs is quick and error-free. The simple way to enter your results into Excel®, Word®, AutoCAD® and other programs for further processing.

■ **User-friendly**

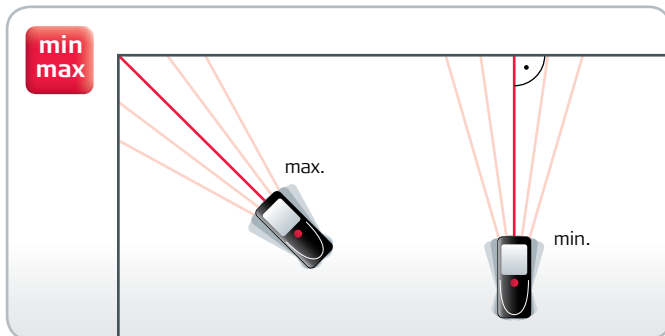
Despite its wealth of functions, the Leica DISTO™ D8 is simple to operate thanks to its optimised user interface and is extremely handy.



This way you'll always achieve your measuring goals

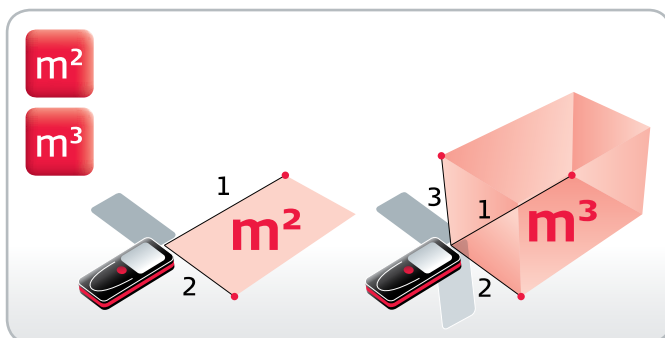
Indoors or outdoors, you can determine every value you need with the Leica DISTO™. Long distances. No problem.

Distances, areas and volumes



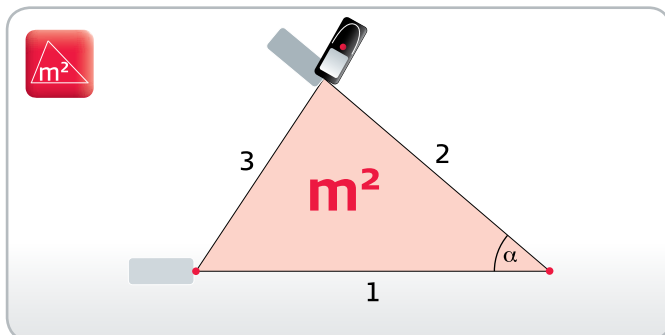
Minimum/maximum measurements

The maximum measurement is very helpful, e.g. for finding the room diagonal. The minimum measurement can be used to measure at right angles to a wall.



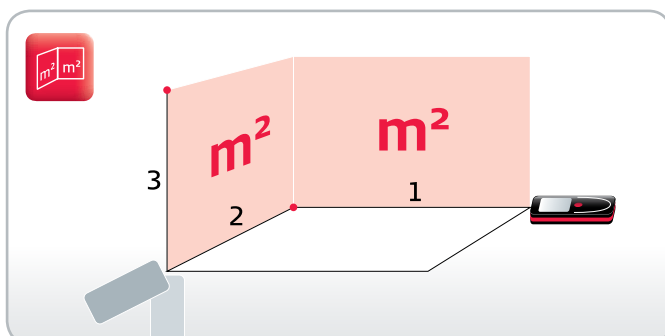
Area and volume measurements

With only two or three measurements, you can quickly and precisely calculate the area of a ceiling, floor or wall, or the volume of a room. No need to note down the individual values! The result is calculated automatically and shown on the display.



Triangle and room angle function

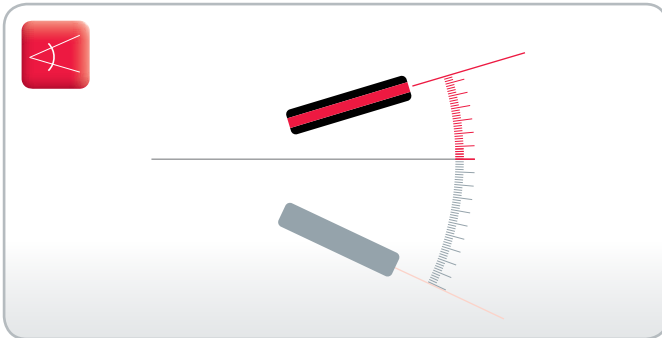
The triangle function helps you to calculate, quickly and efficiently, the area of a multicorned room. Divide the room into imaginary triangles. Using only three measurements, determine the area of each triangle, which you can add up cumulatively. Pressing a key gives you a detailed display of the room angle, so that you can e.g. quickly check whether it is a right angle.



Painter function

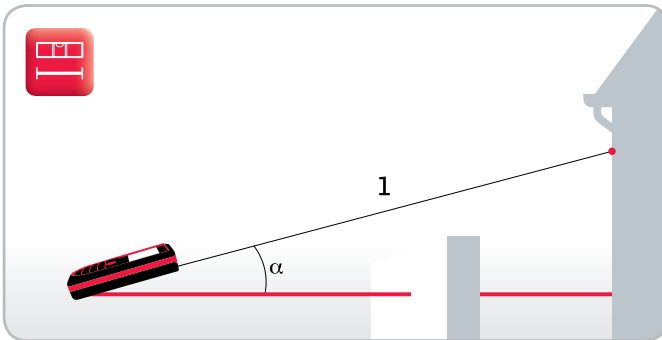
With this function you can determine e.g. the total wall area of a room without having to note down any intermediate results. Simply measure the lengths of the walls which you can add or subtract as required. Finally measure the room height, which is then automatically multiplied by the previously calculated value.

Indirect measurements



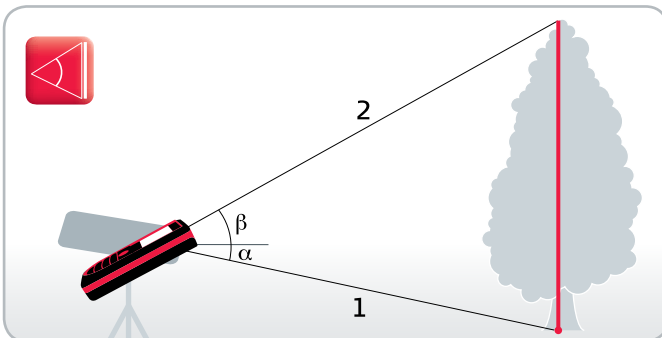
Tilt measurement

The tilt sensors in the Leica DISTOs™ can measure inclinations up to $\pm 45^\circ$, or even have a measurement range of 360° . This means you can measure inclinations over your head. This is particularly interesting for people who wish to determine roof slopes.



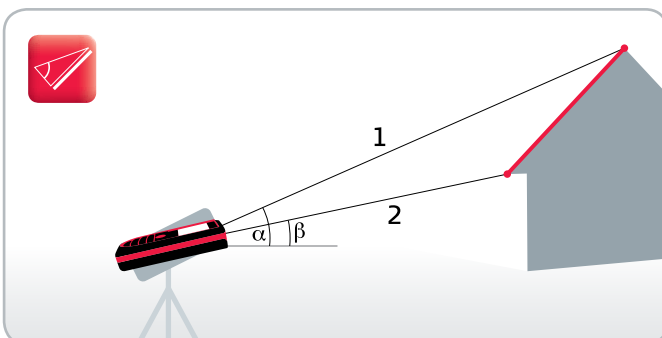
Smart Horizontal Mode™

The desired horizontal distance is determined using the tilt measurement, even if the object cannot be directly targeted horizontally. This function is very helpful, e.g. if walls, hedges or people are between the instrument and the target.



Height tracking

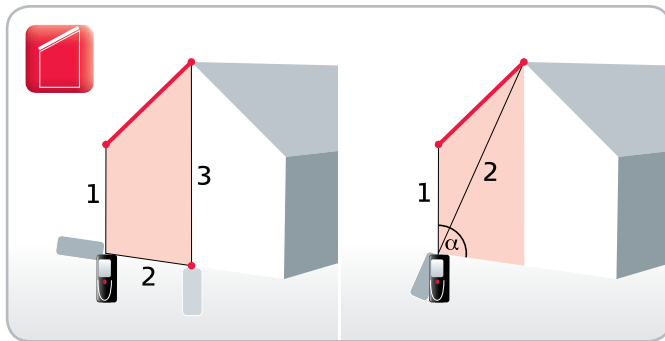
You can determine the heights of buildings or trees that have no suitable reflective points using the height tracking function. Target with the digital pointfinder on the bottom point of the height to be measured and take a measurement. Then target with the laser on the top point of the object. The display then shows the height.



Double tilt measurement

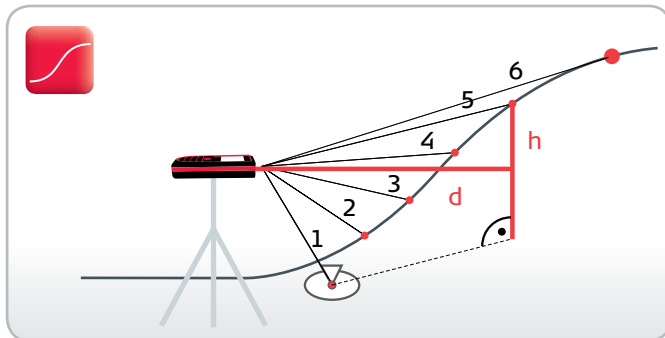
With this function, you can e.g. determine the roof slope of a house, even from a long distance away. To do this you take two distance measurements and the Leica DISTO™ determines the tilt at the same time. Additional detailed information, e.g. the distances and the inclination between the measured points is also provided.

Special functions



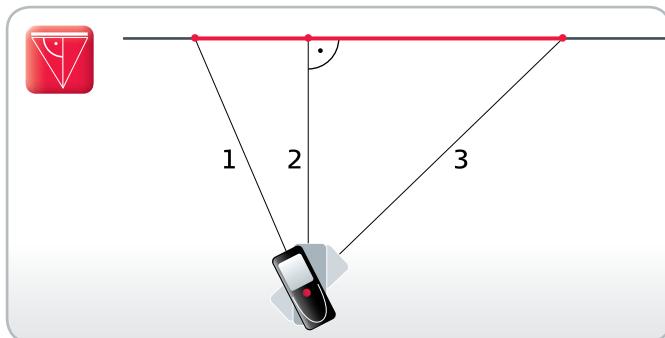
Trapezium measurements

Using the trapezium function, you can quickly and reliably determine e.g. roof slopes and facade areas. You need only three measurements and the result appears on the display. When access to the measured object is limited and the measurement can only be made from one point this is not a problem, thanks to the integrated tilt sensors.



Height profile measurements

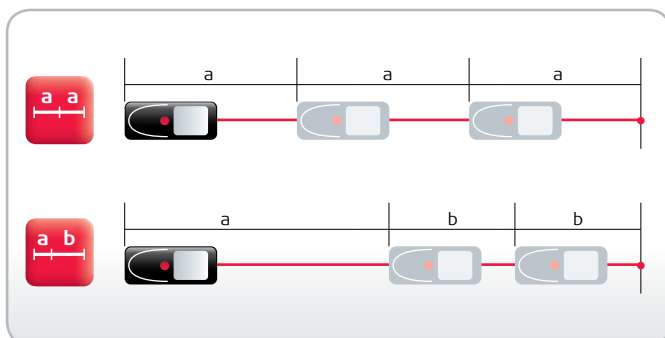
Target the device on a known reference mark and then measure the height differences of other points relative to this. If the measured points are taken all in one direction the profile of the ground can be determined from the measured horizontal distances and the height differences.



Pythagoras functions

Using the tripod, you can measure distances indirectly, horizontally and vertically. The Leica DISTO™ calculates the result automatically for you from three measurements. Functions such as automatic minimum and maximum measurements help you to measure the right point.

Partial heights, e.g. balcony or window heights are determined by Pythagoras.



Stake out function

One or two different distances (a and b) can be entered into the device and then used to subtract from defined measured lengths. The display always shows the current stake-out distance and a direction arrow. At a distance of 0.1 m to the next stake-out point an acoustic signal sounds.

Leica DISTO™ Accessories



Leica TRI 100 tripod

Quality tripod with bubble level, very easy fine adjustment. Extendible length from 0.70m to 1.74m. Art. No. 757938



Universal quick charger

For charging 4 rechargeable batteries; type AA or AAA; With 4 adapters for worldwide use; Including 4 rechargeable batteries type AA/2300mAh Art. No. 782669



UC20 Universal quick charger

For charging 2 rechargeable batteries; type AAA; With 4 adapters for worldwide use; Including 2 rechargeable batteries type Micro AAA NiMH/800mAh Art. No. 788956



Leica LSA360 adapter

For precise indirect measurements with the tilt sensor from the tripod; tilt axis and laser beam are in one plane (elimination of tilt axis error). Suitable for a set-up pole with a diameter of 11-35 mm (0.45"-1.35") and the Leica TRI 100 tripod. Art. No. 769459



Leica TA360 adapter

Handy metal tripod head for easy and precise targeting. Rotary axis, tilt axis and laser axis meet at one point. This leads to minimum deviations when using indirect measurement. Particularly suitable for the Leica TRI 100 tripod. Art. No. 778359



Leica GZM30 target plate

Stick-on target plates for placing on ground markers.

Size: 274×197 mm

Art. No. 766560



Leica GZM26 target plate

For measurements on to poorly reflective surfaces. Two-sided – grey side for shorter distances and brown for longer. Size: 210×297 mm

Art. No. 723385



Leica GZM27 target plate

Stick-on target plates for fixing on to edges and corners.

Size: 147×98 mm

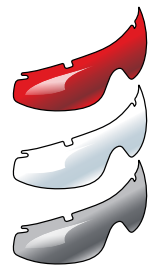
Art. No. 723774



Softbag

Protects the Leica DISTO™ against dust and impact. With additional compartments for operating manual, target plates, pocket PC etc.

Art. No. 667169



3 in 1



GLB30 Super-light laser visibility glasses

For better visibility of the laser dot outdoors. With 3 different lenses: laser visibility glasses, safety glasses, sun glasses.

Art. No. 780117



Your World of Precision Tools

Lino



Lino



DISTO™



Roteo



Roteo



Roteo



3D Disto



The innovative power of the pioneer in laser measuring and construction products goes into every device: Leica Geosystems.

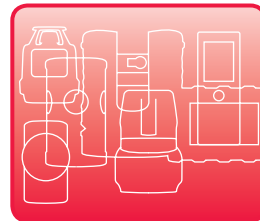
More information:
www.disto.com

Always there for you!

Innovative, competent and always by your side

Product range

The most comprehensive and innovative range of laser distance meters, point, line and rotating lasers from Leica Geosystems has the ideal model for every user. Attractive accessories to make your daily measuring, aligning and leveling tasks even more efficient complete the program.



Free extended warranty

Leica Geosystems' products fulfil the highest quality requirements to support you efficiently in your daily work on site. To give you even more security, we offer a three-year warranty on all devices in the Leica DISTO™, Leica Roteo and Leica Lino families. Just register your device within eight weeks of the date of purchase at www.leica-geosystems.com/registration and profit from an additional free one year warranty.



After Sales Service

Should a device develop a fault despite the care we take during manufacture, our professional After Sales Service will provide you with a quick and customer-friendly solution: defective devices are simply and efficiently replaced by your dealer. Even after the warranty has expired, a defective device is immediately replaced with a new one against the cost of repair. Time is money.



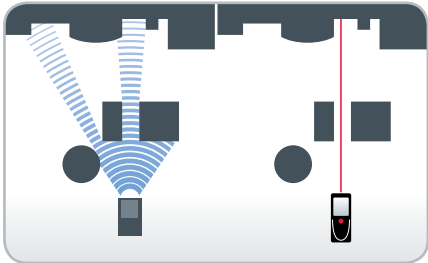
Represented worldwide

Leica Geosystems has a global network of dealers with numerous branches in Europe, Asia and the Americas. We are always there for you.

www.disto.com



Good to know...

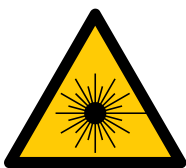
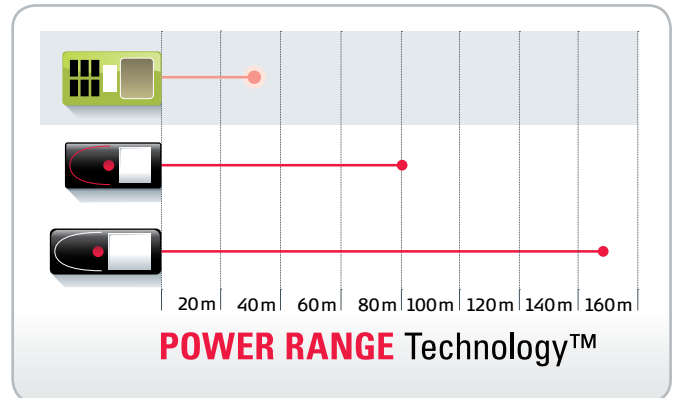


Why are laser distance meters better than ultrasonic measuring devices?

Leica DISTO™s measure with laser light – precisely and past all obstructions. Ultrasonic devices measure with sound waves, which propagate in a cone from the instrument and display inaccurate results. The sound waves are deflected by objects or columns. An ultrasonic device normally has a range of 20m, whereas a Leica DISTO™ measures up to 200m and provides greater accuracy!

What can Power Range Technology™ do for me?

Leica Geosystems based this innovation on a specially developed electronic component that offers great flexibility and provides a cost-effective way of modulating lasers over long distances. Power Range Technology™ allows reliable measurements to be taken over long distances even without a target plate. Before this technology was available, normal practice was to use a target plate for distances greater than 30 to 50m (depending on light conditions). The Leica DISTO™ D210, X310 or D3a BT can now measure without a reflector at a distance of about 80m. The Leica DISTO™ D5 and D8 have a range of up to 150m without a target plate.



Is the laser beam dangerous?

Our laser distance meters are Laser Class 2 devices. This means that our natural blinking reaction protects the eye, should the laser beam strike it.



What does ISO 16331-1 tested mean?

The range and accuracy of laser distance meters depends greatly on lighting conditions and the reflective properties of the target object. For Leica Geosystems it is important that the performance of the device is maintained not only in the test laboratory but even more so on everyday site tasks. Therefore we have worked with external experts to develop a global standard to test laser distance meters and allow comparisons to be made between devices. Instruments tested in accordance with ISO 16331-1 achieve their promises. Further information can be found on our website: www.disto.com.

The Leica DISTO™ Series at a glance

Technical data



Technical Data	D210	X310	D3a BT	D5	D8
Typical measuring accuracy	± 1.0 mm	± 1.0 mm	± 1.0 mm	± 1.0 mm	± 1.0 mm
Range	0.05 – 80 m	0.05 – 80 m	0.05 – 100 m	0.05 – 200 m	0.05 – 200 m
Measuring units	m, ft, in	m, ft, in	m, ft, in	m, ft, in, yd	m, ft, in, yd
Power Range Technology™	●	●	●	●	●
Distance in m	10, 50, 100 m	10, 50, 100 m	10, 50, 100 m	10, 50, 100 m	10, 50, 100 m
Ø of the laser dot in mm	6, 30, 60 mm	6, 30, 60 mm	6, 30, 60 mm	6, 30, 60 mm	6, 30, 60 mm
Tilt sensor measuring range	–	360°	±45°	±45°	360°
Accuracy to the laser beam	–	±0.2°	±0.3°	±0.3°	-0.1°/+0.2°
Accuracy to the housing	–	±0.2°	±0.3°	±0.3°	±0.1°
Units in the tilt sensor	–	0.0°, 0.0%	0.0°, 0.0%	0.0°, 0.00%, mm/m, in/ft	0.0°, 0.00%, mm/m, in/ft
Digital Pointfinder with 4 x zoom	–	–	–	●	●
Store constant values	–	–	1	1	1
Recall last values	10 Results	20 Displays	20 Displays	20 Displays	30 Displays
Time delay release (timer)	–	●	●	●	●
Display illumination	●	●	●	●	●
Free software	–	–	●	–	●
Data interface*	–	–	Bluetooth® (Class 2)	–	Bluetooth® (Class 2)
Measurements per set of batteries	up to 5000	up to 5000	up to 5000**	up to 5000	up to 5000**
Multifunctional end-piece	●	●	●	●	●
Tripod thread	–	●	●	●	●
Batteries	Type AAA 2×1.5 V	Type AAA 2×1.5 V	Type AAA 2×1.5 V	Type AA 2×1.5 V	Type AA 2×1.5 V
Protection class	IP54	IP65	IP54	IP54	IP54
Dimensions	114×50×27 mm	122×55×31 mm	127×49×27.3 mm	143.5×55×30 mm	143.5×55×30 mm
Weight with batteries	126 g	155 g	150 g	195 g	205 g

*) System requirements and recommended Pocket PCs can be found under: www.disto.com

***) Reduced in Bluetooth® mode



Laser Class 2

In accordance with IEC 60825-1

All illustrations, descriptions and technical specifications are subject to change without prior notice.

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Jürgen Vallaster (Site operative)

"Thanks to the Leica DISTO™ X310 with its integrated tilt sensor, I can easily manage a wide range of measuring situations. And I am astounded how robust it is."



Detlef Foht (Crane driver)

"On site I often have to measure long distances very quickly. Therefore I find the Leica DISTO™ D5 with its digital Pointfinder extremely useful."



Wilfried Fink (Carpenter)

"A device that measures distances and tilts, is robust and still fits in my pocket is perfect. Simply brilliant."

Dealer Stamp