

Leica DISTO™

The original
laser distance meter

20
YEARS

Leica DISTO™

Pioneering the future
by tradition.



- when it has to be **right**

Leica
Geosystems

20 years DISTO™

Pioneering the future by tradition



Twenty years ago, Leica Geosystems invented and launched the first hand-held laser distance meter and revolutionised the metrology market. Since then we have been setting the standards for productivity for simple and complex measuring applications. 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.

ISO-16331-1 – the standard for laser distance meters

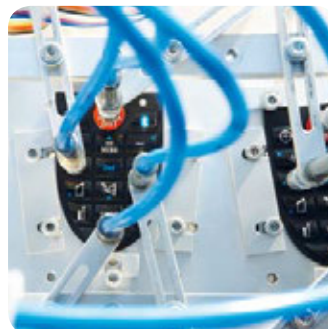
As a market-leading company, Leica Geosystems specifies its measuring equipment for the requirements expected in practice, so that on site it can keep the promise it makes on the box. When it comes to accuracy and range, one thing is certain: the specification will be met in the practical working environment and not just under optimum laboratory conditions.



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.

Leica DISTO™

Which instrument is the right one for me?



D210



X310



D3a BT



D510

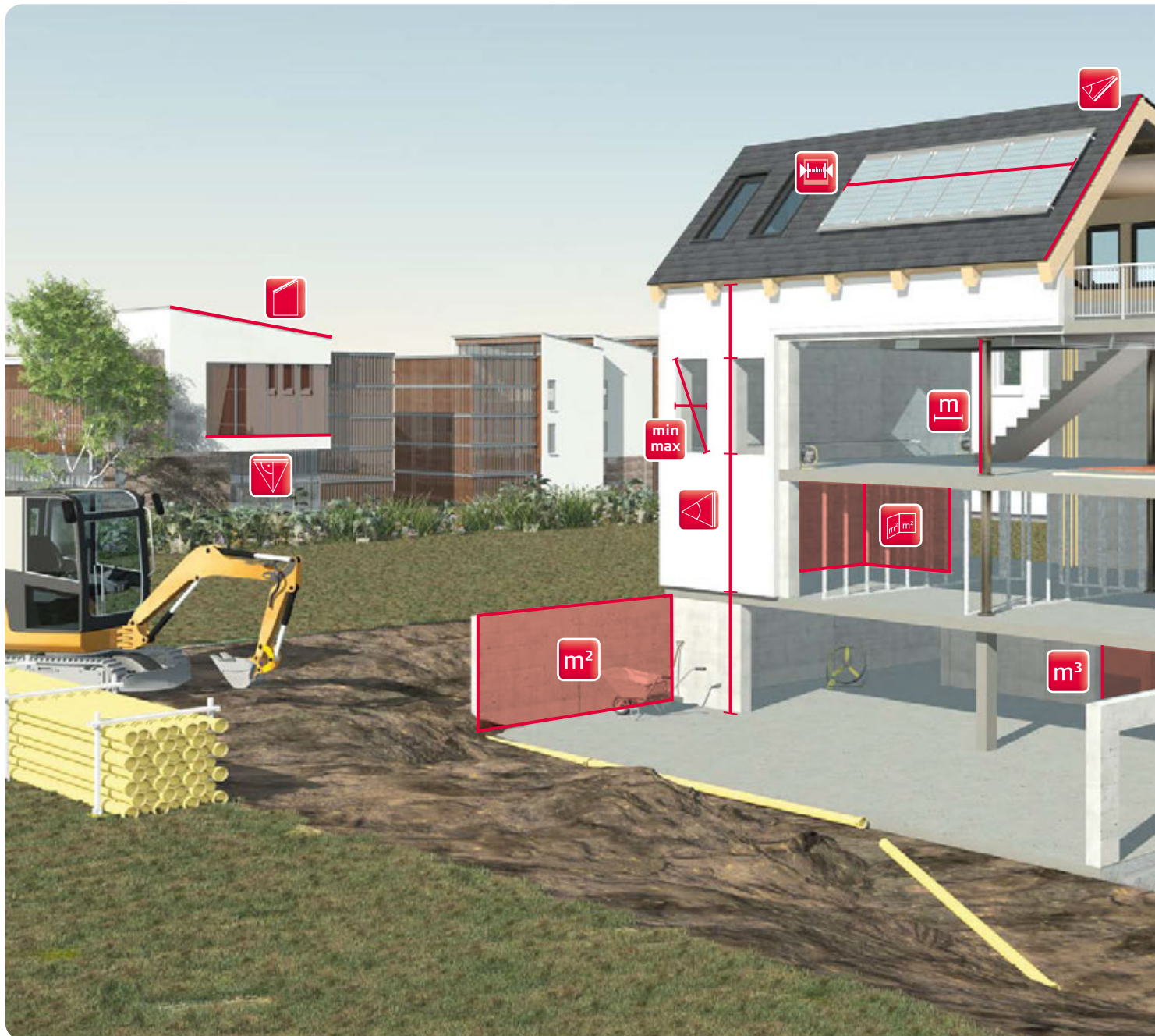


D810 touch

Function	D210	X310	D3a BT	D510	D810 touch
Distance measurement	up to 80 m	up to 120 m	up to 100 m	up to 200 m	up to 200 m
Minimum / maximum measurements	●	●	●	●	●
Area/volume measurements	●	●	●	●	●
Triangle / room angle function	○	●	●	●	●
Painter function	●	●	●	●	●
Trapezium function	○	○	○	●	●
Pythagoras functions	●	●	●	●	●
Tilt measurement	○	360°	±45°	360°	360°
Smart Horizontal Mode™	○	●	●	●	●
Sloped object measurement	○	○	○	●	●
Height tracking	○	●	○	●	●
Height profile measurements	○	○	○	●	●
Stake-out function	a/a	a/b	a/b	a/b	a/b
Subtraction / addition	●	●	●	●	●
Pointfinder with 4x zoom	○	○	○	●	●
Camera function	○	○	○	○	●
Measure with the picture	○	○	○	○	●
Timer	○	●	●	●	●
Personalised favourites	○	○	○	●	●
Touch screen	○	○	○	○	●
Compass	○	○	○	○	●
Bluetooth®	○	○	Bluetooth®	Bluetooth® SMART	Bluetooth® SMART

Measuring with the Leica DISTO™

Simple, quick and accurate

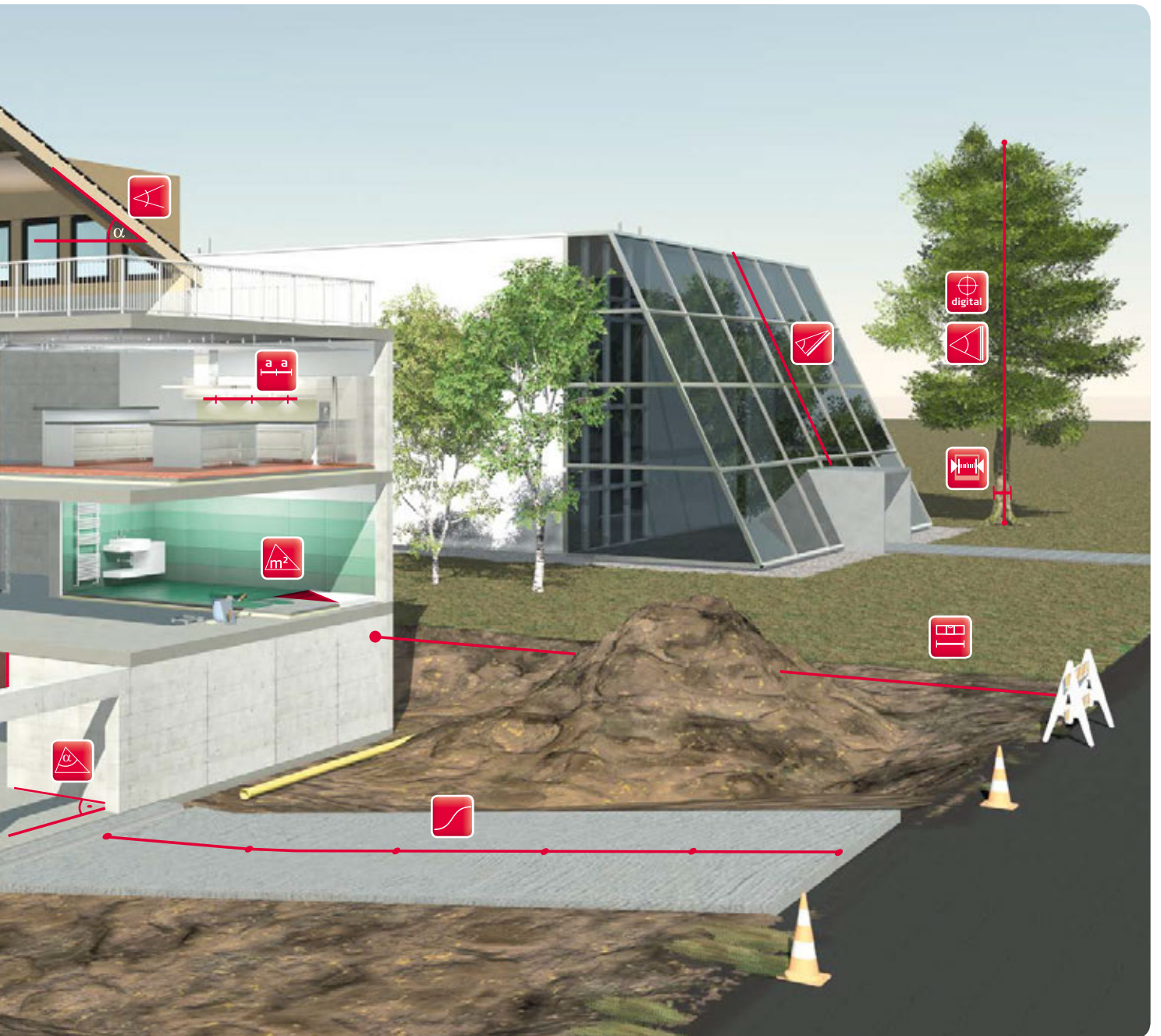


Quick and efficient

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

Precise and reliable

Measure distances to millimetre accuracy! 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

Professionals are inspired



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

Modern measuring

Technology from Leica Geosystems

Continuous further development and new technologies mean Leica DISTO™s provide comprehensive functionality. Equipped with a multitude of innovations, they are flexible and versatile across a wide range of applications. When in use, Leica DISTO™s excel through the highest accuracy and reliability.



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.



Pointfinder and colour display

The digital Pointfinder, with its 4x zoom and large 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.



Measure with a picture

Determining dimensions in a picture is revolutionary. Only the distance to the object is measured. Then the desired dimension can be marked using arrows in the display and the measured value appears.

Leica DISTO™

Top performance whatever the conditions



The Leica DISTO™s provide you with the right function for every application. Versatile and robust, they match their daily tasks.

Leica DISTO™

The right one for every job



reddot design award
winner 2013

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 lightweight 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 to avoid expensive measuring errors.



reddot design award
winner 2013

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 Android Tablet or PC.

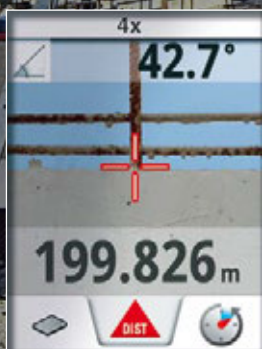
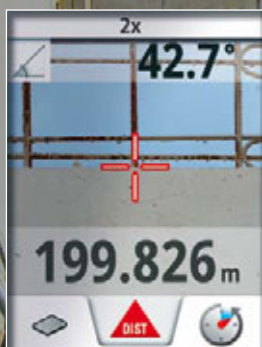
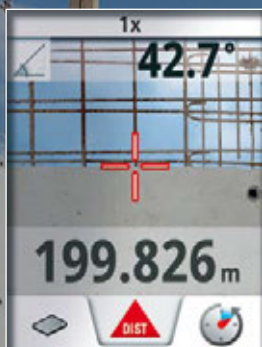
■ Free software

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



Precise targeting and measuring

Colour display and digital Pointfinder with 4x zoom

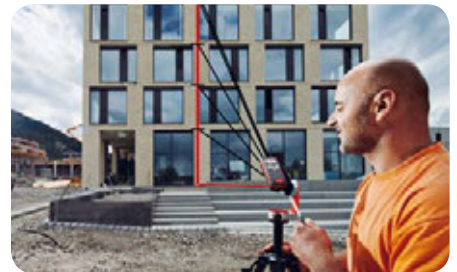


DISTO™ D510

Reliable outdoor functionality



Height profile measurements



Height tracking

■ Pointfinder with 4x zoom

The Pointfinder allows the user to target distant objects quickly and easily in bright sunlight. Even if the laser dot cannot be seen with the naked eye, the target appears clearly on the large high-resolution colour display. Distance measurements are absolutely precise over long distances.

■ Perfect for smartphone and tablet

Bluetooth® Smart technology allows data transfer to smartphones and tablets. In addition to the smart free App Leica DISTO™ sketch, there is also a host of other Apps to allow you to work efficiently and avoid typing errors when recording measurement results.

■ Smart measuring

The combination of tilt sensor and Pointfinder provides another means of simply and precisely taking measurements of heights. For example, if a building has no suitable reflective point, its height can still be determined using height tracking.

■ Modern user interface

All functions can be clearly seen on the functions display and simply selected. Your favourite functions can be assigned to a pair of selection keys, for quick access with a single button press. The integrated, easy-to-understand help function does not leave you in the lurch on site.



The world's first

Measuring in pictures with the optical zoom



Leica DISTO™ D810 touch

The smartest solution to measuring and documenting



Measuring sloped objects



Precise targeting with the Pointfinder

■ Simply touch-it

Large touch screen for quick and intuitive operation. Using common gestures such as swipe and zoom with two fingers, all the functions are simply and easily accessible. Measurements can also be taken using the touch screen. This avoids unintentionally moving the Leica DISTO™ D810 touch during the measurement.

■ Measure with a picture

It has never been easier to determine the width, height, area or even the diameter of an object. One measurement at right angles to the object is all it takes. Then the desired dimension is marked using two arrows in the picture and the measured value appears in the display. In addition to the zoom stages on the Pointfinder, an overview camera is available for large objects.

■ Documentation using pictures

The camera function on the Leica DISTO™ D810 touch can be used to create pictures or screen shots for record purposes, which can then be downloaded to a computer via the USB interface. Thus no details about the measured target points need be lost.

■ High precision

The Leica DISTO™ D810 touch offers a number of indirect measuring functions. Due to the specially developed tilt sensor the results are very precise. Even more accurate results can be achieved using the Leica FTA360 tripod adapter with fine drive because this adapter allows exact targeting.

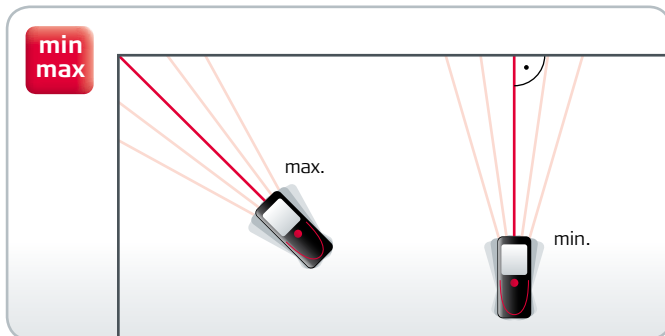
■ Flexible data transfer

In keypad mode, you can link your Leica DISTO™ D810 touch to your computer and send measured values in the form of a keyboard entry to any program. This provides a high degree of flexibility.



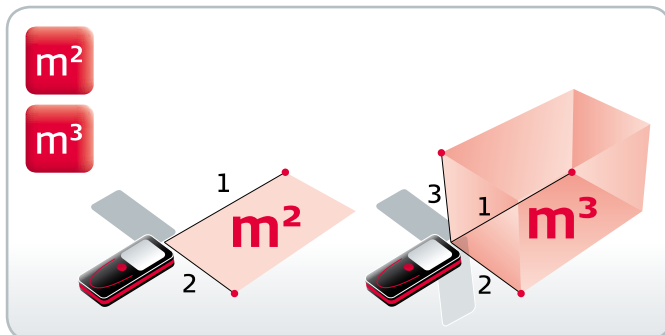
Any measurements are possible

Distances, areas and volumes



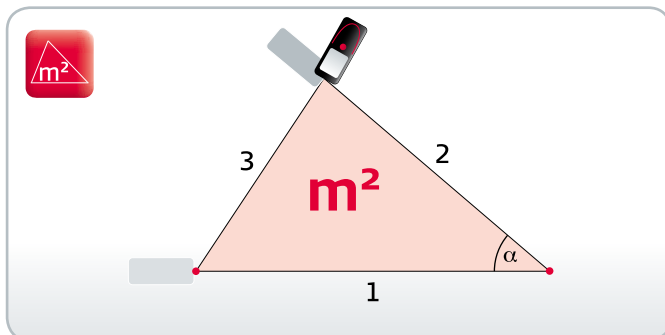
Minimum / maximum measurements

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



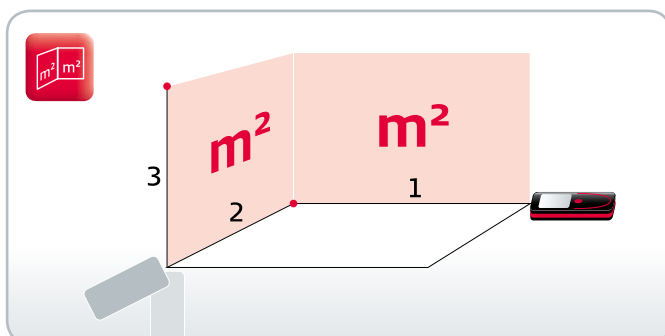
Area and volume measurements

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.

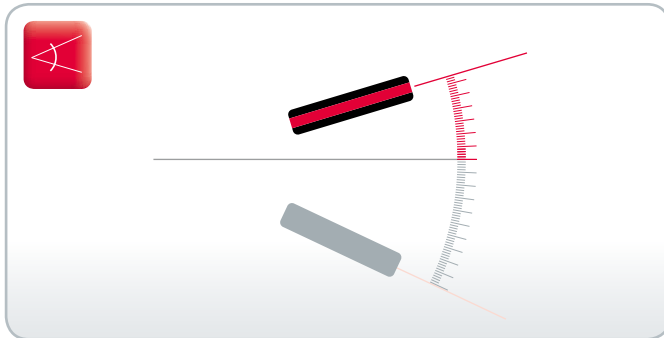


Painter function

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.

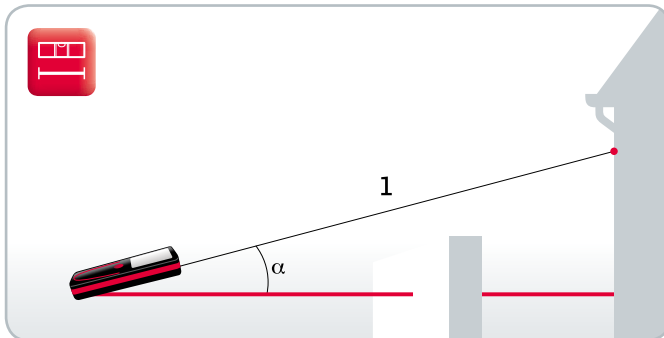
Precise indirect measurements

Measuring with the tilt sensor



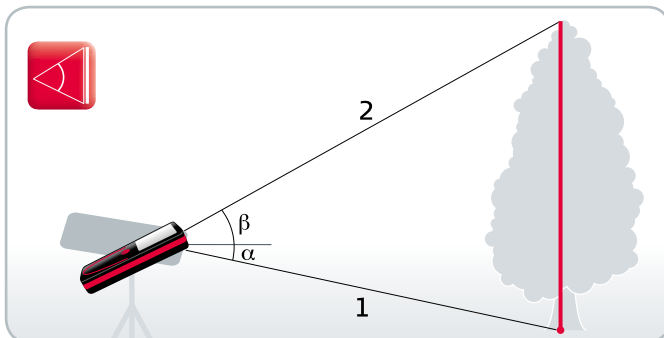
Tilt measurement

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



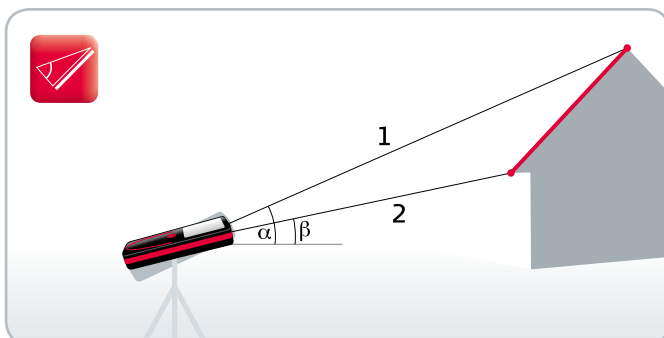
Smart Horizontal Mode™

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 by using the height tracking function. Target with the Pointfinder on the bottom point of the height to be measured and take a measurement. Then target on the top point of the object. The display then shows the height.

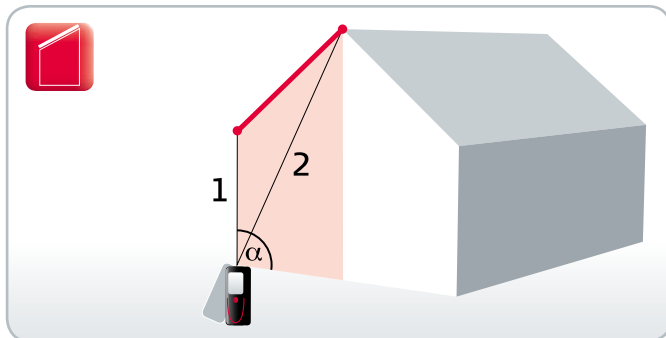


Sloped object measurement

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.

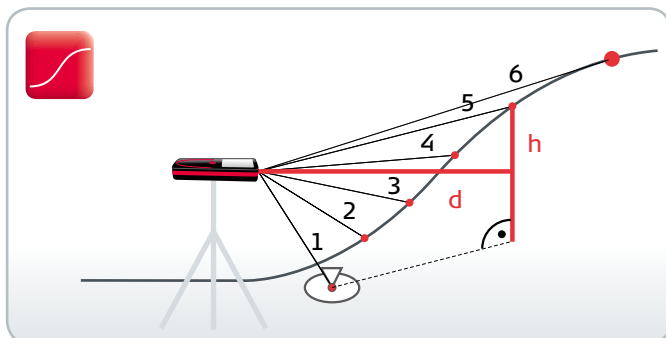
Still more measurement possibilities

Special functions



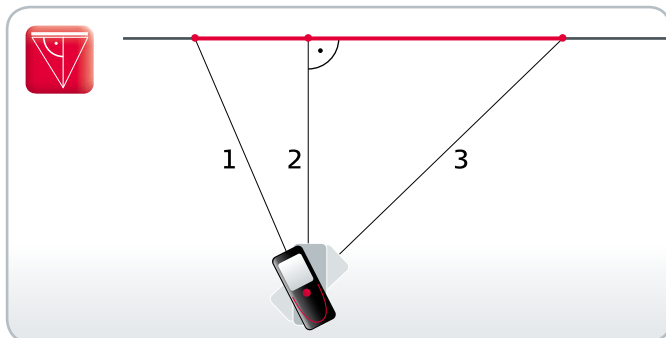
Trapezium measurements

Using the trapezium function, you can quickly and reliably determine e.g. roof slopes and facade areas. You need only two measurements. The integrated tilt sensor determines the tilt at the same time.



Height profile measurements

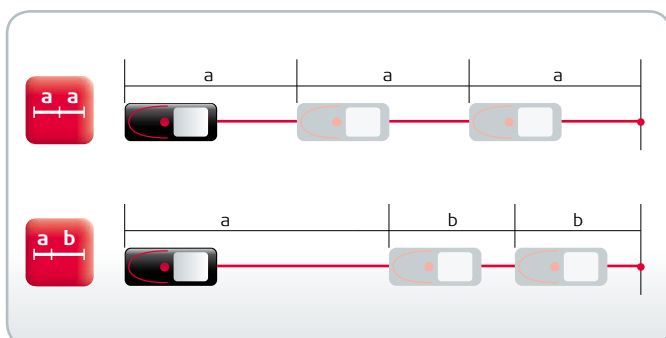
Target the device on a known reference mark and then measure the height differences of other points relative to this. If the measured points are taken all in one direction the profile of the ground can be determined from the measured horizontal distances and the height differences.



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.

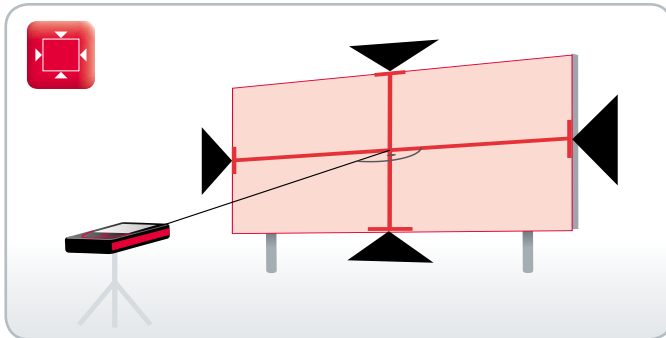


Stake-out function

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.

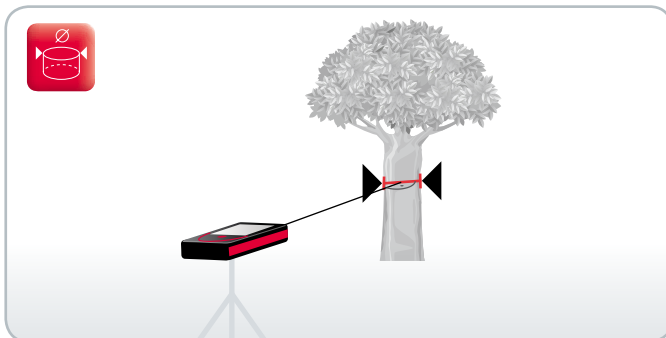
The world's first

Measure and document with pictures



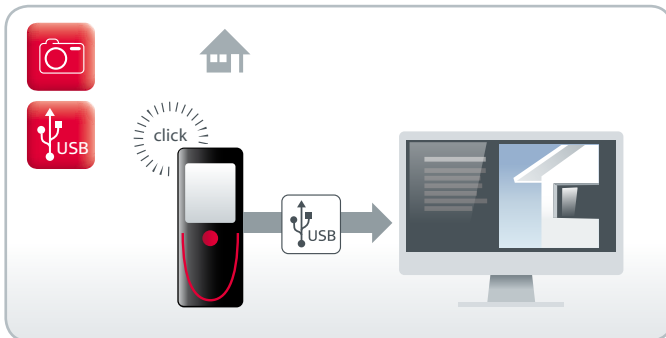
Measuring widths, heights and areas

You measure at right angles to the object. The object appears in the display and then you can mark the required dimension with the arrows. The display then shows the value. In this way you can, for example, measure the width, height and area of an advertising board using only one distance measurement.



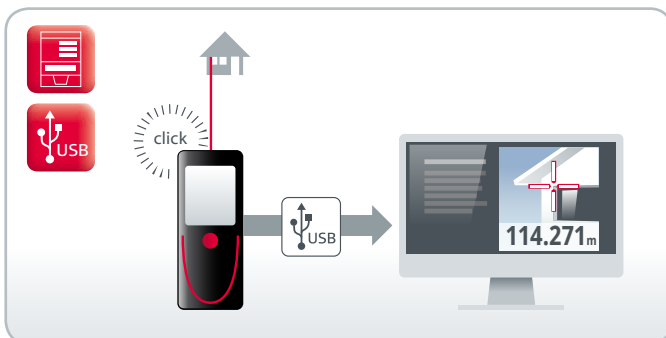
Diameter measurement

Measure to the centre of the object with the device. The object appears in the display and then you can mark the diameter with the arrows. The display then shows the result. This function is ideal, for example, for determining the diameter of a tree trunk.



Take pictures with the overview camera

Take pictures for record purposes and download them to your computer using the USB interface. The integrated overview camera gives you more image information. With tricky measurements for example, you can photograph and record target points or specific features.



Screen shots

This function is outstandingly suitable for recording information about measurements. You can save all information appearing in the display, i.e. the measurement results and the view of the Piontfinder, and then transfer it over the USB interface to a computer. This ensures every measurement is always clearly identified.

Leica DISTO™ sketch App

Take your office to the construction site

The smart App "Leica DISTO™ sketch" is the ideal link between the Leica DISTO™ with Bluetooth® Smart and a smartphone or a tablet. It allows you to create and precisely dimension sketches and pictures. The files can then be sent directly to the office. This simplifies and speeds up work flow.

Leica DISTO™ sketch



■ Create a scale drawing

Draw a sketch simply using your finger on the touch screen of your smartphone or tablet. Your freehand lines will be automatically straightened. The results of your measurements can be just as easily assigned to the relevant lines. The "Auto-scale" function adjusts the line lengths automatically to create a scale drawing.

■ Dimension objects in pictures

If you take a photograph with your smartphone or tablet, you can transfer the dimensions from the Leica DISTO™ using Bluetooth® Smart and add the appropriate distances to the picture. This allows you to document all measurement results and then assign them correctly in the office.

■ Integrating detailed sketches

Create and dimension a sketch or an image and add it to an existing sketch, e.g. to a plan view. Any quick sketch can be augmented with detailed information. This offers a completely new way of recording information in documentation.

■ Checking construction drawings

Compare a PDF drawing that you have opened on your smartphone or tablet with reality and add any measurements taken, notes, sketches or pictures. This allows you to have all the information together in a single document.

Leica DISTO™ and Lino case

The professional set for easy measuring and aligning

This set was specially put together for internal finishing works. It contains everything you need for precise and reliable measuring and aligning. The Leica DISTO™ D210 laser distance meter, the Lino L2 cross line laser and the TRI 70 staff are safely stowed, ready for action, in the robust, attractive and functional case. Nothing can get lost or forgotten, thanks to the clear arrangement of the devices in the case. The instruments are compact, easily carried and simple to use.



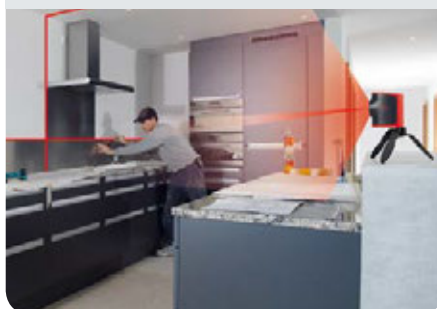
Laser distance meter Leica DISTO™ D210

The small and handy entry model has many interesting functions and yet is simple and easy to operate. Addition and subtraction as well as area and volume functions allow you to calculate quantities quickly and reliably.



Cross line laser Leica Lino L2

The Leica Lino L2 projects outstandingly visible laser lines, precisely, quickly and simply – leaving you to concentrate on your work. Time-consuming and laborious drawn lines are a thing of the past.



Tripod Leica TRI 70

The compact, strong and handy tripod for everyday use.

Robust, attractive and functional case



Leica DISTO™

Original accessories



Leica TRI 70 tripod

The small portable tripod is intended for everyday use. Its features include easy fine adjustment and a bubble level. Extendible length from 0.40m to 1.15m. Ideal with the Leica TA360 or FTA360 adapter.
Art.No. 794963



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 TRI100 tripod

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



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

Convenient adapter for easy and precise targeting. This minimizes deviations when using indirect measurement. Especially suitable for the Leica DISTO™ D3a BT, D5 and D8 in combination with the Leica TRI 70 and 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. 766 560



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. 723 385



Leica GZM27 target plate

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

Size: 147× 98 mm.
Art.No. 723 774



Leica FTA360 adapter

Sturdy adapter with fine drive for convenient and precise targeting. The adapter eases the task of targeting, above all over long distances, and reduces the discrepancies to a minimum when taking indirect measurements. Especially suitable for the Leica DISTO™ D510 and D810 touch in combination with the Leica TRI 70 and TRI 100 tripods.
Art.No. 799 301



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 and sun glasses.
Art.No. 780 117



Your world of precision tools

Lino



Lino



DISTO™



Lino



Roteo



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

More information:
www.disto.com

Roteo



3D Disto



PROTECT by Leica Geosystems

We always protect your success



Lifetime Manufacturer's Warranty

Warranty coverage for the entire usage time of the product, in accordance with Leica Geosystems International Limited Warranty. This includes free of charge repair or replacement for all products that suffer defects as a result of faults in materials or manufacturing.

3 Years No Cost Period

Leica Geosystems' products fulfil the highest quality requirements to support you efficiently in your daily work on site. To provide you with even more security, we offer a 3 year "no cost period" on all devices in the Leica DISTO™, Leica Roteo and Leica Lino range.

Should your product become defective under normal conditions of use (as described in the user manual), it will be simply and efficiently replaced by your dealer. Time is money. Simply register your device within 8 weeks from the date of purchase at www.leica-geosystems.com/registration and extend your no cost period from 2 to 3 years.

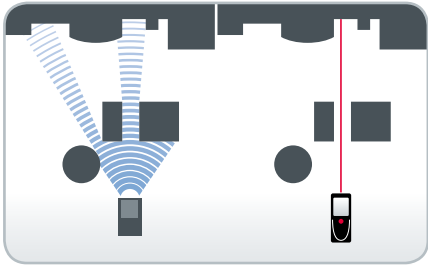
Certified Quality

Leica Geosystems runs calibration laboratories (No. SCS079) and a test laboratory (No. STS549). Both are fully accredited by the SAS, the Swiss Accreditation Service. The calibration and test certificates issued by Leica Geosystems are officially and internationally recognised for horizon, angle, distance, frequency and laser classification. This confirmation of precision guarantees the highest possible reliability for our products. All laboratories are regularly controlled by an independent national institution according to ISO 17025.

Swiss Technology

Our worldwide operations are state-of-the-art production centres, where Swiss precision, extraordinary craftsmanship and cutting-edge technology go hand-in-hand. Continuous and extensive tests throughout all stages of development and production ensure our products meet the highest standards for precision and quality.

Good to know ...

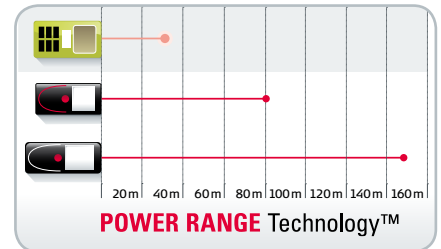


Why are laser distance meters better than ultrasonic measuring devices?

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.



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.



Bluetooth® technology at a glance

	Integrated Bluetooth® Technology	Windows computer	Android	Apple iOS
Leica DISTO™ D3a BT	Bluetooth® 2.1	Bluetooth® from 2.1	Bluetooth® from 2.1 with SPP profile Android from V2.3.3	–
Leica DISTO™ D510	Bluetooth® Smart	–	From Android 4.3 Bluetooth® 4.0	From iPhone 4S and iPad 3 rd Generation Bluetooth® 4.0
Leica DISTO™ D810 touch	Bluetooth® Smart	From Windows 8 Bluetooth® 4.0	From Android 4.3 Bluetooth® 4.0	From iPhone 4S and iPad 3 rd Generation Bluetooth® 4.0

Software and Apps at a glance

	Where can I obtain this software?	Windows computer	Android	Apple iOS
Leica DISTO™ sketch	Available free from the Webstore		●	●
Leica DISTO™ transfer Excel®	Available free from the Webstore		●	
Leica DISTO™ transfer Excel®, AutoCAD®	Supplied or downloaded from www.disto.com	●		

Further interesting Apps in the field of measurement can be found in the relevant Appstore

The Leica DISTO™ Series at a glance

Technical data



Technical data	D210	X310	D3a BT	D510	D810 touch
Typ. measuring accuracy	± 1.0mm	± 1.0mm	± 1.0mm	± 1.0mm	± 1.0mm
Range	0.05 up to 80m	0.05 up to 120m	0.05 up to 100m	0.05 up to 200m	0.05 up to 200m
Measuring units	m, ft, in	m, ft, in	m, ft, in	m, ft, in	m, ft, in
Power Range Technology™	●	●	●	●	●
Distance in m	10, 50, 100m	10, 50, 100m	10, 50, 100m	10, 50, 100m	10, 50, 100m
Ø of the laser dot in mm	6, 30, 60mm	6, 30, 60mm	6, 30, 60mm	6, 30, 60mm	6, 30, 60mm
Tilt sensor measuring range	–	360°	±45°	360°	360°
Accuracy to the laser beam	–	±0.2°	±0.3°	± 0.2°	-0.1° / +0.2°
Accuracy to the housing	–	±0.2°	±0.3°	± 0.2°	±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
Pointfinder with 4x zoom	–	–	–	●	●
Overview camera	–	–	–	–	●
Photograph file format	–	–	–	–	.jpg
Memory	10 results	20 displays	20 displays	30 displays	30 displays
Time delay release (timer)	–	●	●	●	●
Display illumination	●	●	●	●	●
Free software for Windows	–	–	●	–	●
Free App	–	–	Android	iOS/Android	iOS/Android
Data interface*	–	–	Bluetooth® 2.1	Bluetooth® SMART	Bluetooth® SMART
Measurements per set of batteries	up to 5000	up to 5000	up to 5000**	up to 5000**	up to 4000**
Multifunctional end-piece	●	●	●	●	●
Tripod thread	–	●	●	●	●
Batteries	type AAA 2 × 1.5V	type AAA 2 × 1.5V	type AAA 2 × 1.5V	type AA 2 × 1.5V	Li-ion rechargeable
Charging time	–	–	–	–	4h
Protection class	IP54	IP65	IP54	IP65	IP54
Dimensions	114 × 50 × 27 mm	122 × 55 × 31 mm	127 × 49 × 27.3 mm	143 × 58 × 29 mm	164 × 61 × 31 mm
Weight with batteries	126 g	155 g	150 g	198 g	238 g

*) System requirements and other details can be found at www.disto.com

**) Reduced in Bluetooth® mode



Laser class 2
in accordance with
IEC 60825-1

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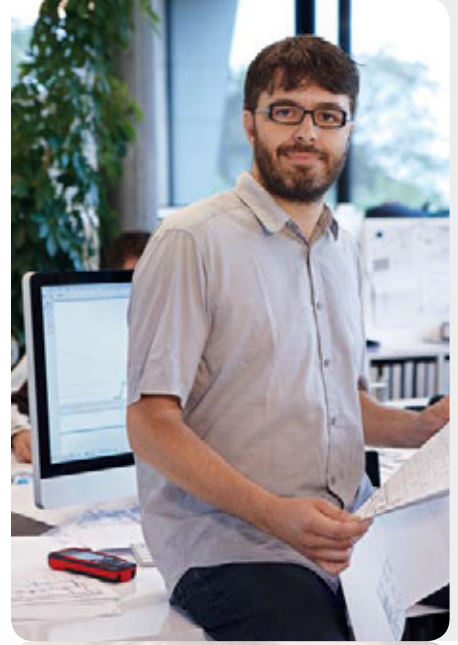
Jürgen Vallaster (Site operative)

"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."



Jakob Galehr (Site engineer)

"The Pointfinder on the Leica DISTO™ D510 is really super. Now I can finally see where I'm measuring to, even in sunlight. I never go on site without my DISTO™."



Patrick Wiesner (Architect)

"The Leica DISTO™ D810 touch is at last a laser distance meter that not only measures but also allows you to record the results in a picture. Simply brilliant."

Dealer stamp