## Leica DISTO™

# **UP TO ANY TASK**



- when it has to be right



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# When it has to be right – outstanding measuring performance, built on decades of experience

Leica Geosystems has been trusted by professionals worldwide for nearly 200 years. We are proud of our history and pioneering solutions to measure the world with Swiss technology. We represent precision, reliability, quality and sustainability – important values of our company.

We understand the challenges and needs of daily measurement tasks, from long-distance measurements in bright sunlight to point-to-point measurements of a clear span of a beam. Our innovative solutions are designed to support and simplify workflows across many different industries.

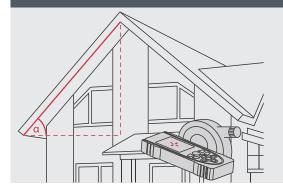
Our products are manufactured in state-of-the-art facilities around the world. Swiss technology is combined with exceptional craftsmanship to ensure highest precision and quality standards.

## Our unique technologies

## Technology from Leica Geosystems

Continuous further development and new technologies mean that Leica DISTO™ devices 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™ excels through the highest accuracy and reliability.

#### Point to Point Technology (P2P)



Using this innovative technology allows you to measure the distance between any two points from one position quickly and easily. New sensor types used by the Leica DST 360 and the Smart Base of the Leica DISTO™ S910, use angle information to make this possible.

#### **Pointfinder**



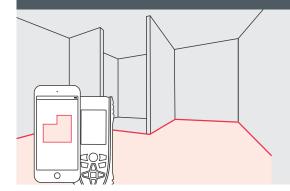
The digital Pointfinder, with its 4× zoom and large colour display, makes targeting easier over long distances. The high-resolution screen ensures a crystal-clear image, allowing you to measure perfectly, even in bright sunlight.

#### ISO: Certified Quality-Assured reliability



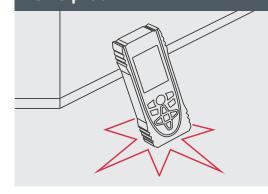
The range and accuracy of all Leica DISTO™ devices are checked in accordance with ISO 16331-1. As a result, you can be sure that the performance of the instrument is maintained not only in the test laboratory but even more importantly on everyday site tasks.

#### **Smart Room**



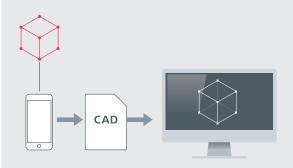
The Leica DISTO<sup>TM</sup> X3 and X4 in combination with the DISTO<sup>TM</sup> Plan app increase efficiency. New technologies allow the devices to keep a record of distance measurements and the angle between any two of those measurements at the same time. The app then transforms that information into accurate floor plans on your tablet or smartphone.

#### Site proof



All devices are protected against dust and splash water to a minimum of IP 54 making them well equipped for everyday site tasks. The Leica DISTO™ X3, X4 and D510 achieve IP 65 for ratings making them perfect for rugged job site conditions.

#### Leica DISTO™ compatible apps



Many other apps, like the AutoCAD® Mobile app, are available to make full use of your Leica DISTO $^{TM}$ . This allows you to draw site plans in real time and share the data as dxf files with others.

# Leica DISTO™ series at a glance

## Which one is right for me?





		<u>=</u>	
Applications		D1	D110
General important aspects	Digital Pointfinder for outdoor measuring		
	Max. range	40 m	60 m
	Accuracy	± 2mm	± 1.5 mm
	P2P functionality		
	Extra durable housing with IP 65 and 2m drop tested		
Computer	Interfaces	Bluetooth® Smart	Bluetooth® Smar
nterface	Data transfer to DISTO™ Plan and DISTO™ compatible apps	•	•
	Data transfer to any software or app		
Distances	Distance measurement from device	•	•
	Dimensional measurements on objects	•	•
	Indirect distance measurement over obstacles		
	P2P function — any distance between 2 points		
Areas	Rectangular shapes (length and width)		•
	P2P — Smart Area for complex shapes		
	Measure in picture — facades, vertical boards		
/olume	Rectangular shapes (length, width, height)		
Vidths	Using Pythagoras Theorem		
viduis	Measure in picture — width measurement		
	P2P function		
	- El Turiction		
Heights	Smart functions using distance and inclination for calculation		
	Height profile		
	P2P function		
Slopes	Inclinations		
•	Smart functions using distance and inclination for calculation		
	P2P function		
Diameter	Measure in picture — diameter of objects		
ositioning	Continuous measuring — tracking	•	•
	Stake-out		
	Plumbing, transferring heights		
	Projection of pre-defined pattern or dxf data		
Planing	P2P — dxf data capturing on device		
	Draw and measure (floor)plans	•**	•**
	P2P — point capturing for floor plans and facades		
	Smart Room — measure and draw		
	pdf, jpg and dxf exports	•**	•**
	Measure and document on picture	•**	•**
	Automatic scan of structures		
leekilitu	Taucherman		
Jsability	Touchscreen		
	Favorite keys		
	Automatic end piece		















	_					
D2	Х3	X4	D510	D810 touch	S910	3D Disto
		•	•	•	•	•
100 m	150 m	150 m	200 m	250 m	300 m	50 m
± 1.5 mm		± 1 mm				
I 1.5111111	± 1 mm	± 1111111	± 1 mm	± 1mm	± 1 mm	± 1mm
			10.45		•	•
	•	•	IP 65			
Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart		Bluetooth® Smart, WLAN	WLAN
•	•	•	•	•	•	
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## Leica DISTO™

## The right one for every job



#### DISTOTM D1

Professional laser measuring for all

#### Fast and reliable

Measure distances in seconds, without help from another person, by just pressing a button. Avoid the risk of work accidents during cumbersome and dangerous measuring processes, e.g. when measuring heights.

#### Precision at the touch of a button

Thanks to its precise laser technology, the starter model Leica DISTO™ D1 always produces reliable measurement results. Operating the unit is very easy and intuitive. Trust the original laser distance meter.

#### The app for more functionality

The Leica DISTO™ D1 can be quickly and easily connected with the Leica DISTO™ Plan app. Documenting and sending measurements is now very simple.



#### DISTO™ D110

Small size – great possibilities

#### Small and handy

Thanks to its ergonomic design, the Leica DISTO™ 110 handles perfectly and is a joy to use. The self-explanatory keys ensure operation is quick and intuitive.

#### **Bluetooth® Smart**

The latest Leica DISTO™ Plan app is the ideal link between the Leica DISTO™ D110 and a smartphone or tablet. It allows you to create accurate layouts and drawings.

#### Always at hand

The detachable pocket clip is a clever accessory for carrying the Leica DISTO™ D110 on your clothing. Use it to attach the unit to your trousers, shirt or jacket so that you have it always at hand.



#### DISTOTM D2

Compact device - long range

#### Long distances

With the help of the innovative X-Range Power technology this small device can measure long distances of up to 100 m. In addition, this technology ensures optimum measuring performance, i.e. fast and reliable measurements.

#### **Useful functions**

The device can recall your last 10 measurements. Other handy features, including addition, subtraction, area and volume calculations are easy to use.

#### Error-free data transfer

With the help of the integrated Bluetooth® Smart technology you can transfer your measurements directly to your smartphone or tablet and avoid expensive typing errors. You can further streamline your work process by using the smart app Leica DISTO™ Plan.



## Leica DISTO™ X3

## Designed for tough, rugged conditions





The rugged Leica DISTO™ X-series combines innovative measuring technologies with a site-proof design and simple user interface. Together with the Leica DST 360, the X-series can be turned into a powerful 3D capturing station.

#### **Robust**

The precision measurement module is protected by solid rubber. The Leica DISTO<sup>TM</sup> X-series is therefore particularly resistant. It is drop-tested up to 2 m in height.

#### **Protection class IP 65**

The housing and keypad are water jet and dust protected. Cleaning the device under running water is no problem.

#### Tilt sensor and Smart Room

The combination of distance and tilt measurements allows you to easily determine horizontal distances with absolute precision. You can even use your measurement data to automatically generate realistic and scaled floor plans.

#### Rotatable display

The display automatically rotates in line with the orientation of the device; meaning you can easily read the screen from any angle.



## Leica DISTO™ X4

## Designed for bright, outdoor environments



#### Pointfinder camera

The DISTO™ X4 is equipped with a Pointfinder camera allowing you to easily target distant objects in bright sunlight. Even if the laser dot cannot be seen, the target appears clearly on the large colour display. The high-resolution screen ensures a crystal-clear image. Distance measurements are absolutely precise over long distances.



## Leica DST 360

## Make your X-series into a P2P tool

#### Point to Point Measuring (P2P)

The DST 360 is a great addition for your Leica DISTO™ X3 and X4. It will transform your handheld tool into a real station allowing you to measure distances between any 2 points. In combination with the Leica DISTO™ Plan app you can draw scaled plans which can be used in CAD tools.

#### Metal design

The Leica DST 360 is made entirely out of metal. This ensures highest robustness and continuous precision.

#### **Precise aiming**

Fine adjustment handles on the Leica DST 360 allow you to accurately aim at measurement points in seconds.

#### Job site ready

The Leica DST 360 comes with a compact but sturdy tripod TRI 120. Both are stored in a very robust case (IP 67) with space for your Leica DISTO™ X3 or X4. This means all your equipment is stored safely in one place.

## Leica DISTO™ D510

## Precise targeting with the Pointfinder





#### **Pointfinder**

Outdoor lighting conditions and long distances can limit laser visibility. The digital Pointfinder with its  $4 \times$  zoom overcomes this issue and makes tricky outdoor measurements an easy task.

#### Tilt sensor 360°

Using the tilt sensor, you can quickly and easily determine tilts. The tilt sensor also allows you to measure horizontally or measure past obstructions. The results are guaranteed to be reliable.

#### **Smart measuring**

The combination of tilt sensor and Pointfinder opens up some astounding ways of taking indirect measurements. Measurements can also be taken from objects that do not have a suitable reflective target point, e.g. when determining the height of a tree or when measuring the height of a reflecting glass facade. This is not possible with a conventional laser distance meter.

#### Height profile measuring

The Leica DISTO<sup>TM</sup> D510 in combination with its tripod adapter FTA 360 make measuring elevation differences in a landscape or determining height differences in a building an easy task. You can simply take one initial reference measurement and relate all subsequent measurements to the initial one. There is no need for additional tools.

## Leica DISTO™ D810 touch

## Measuring in pictures with the optical zoom





#### 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 $^{\text{TM}}$  D810 touch during the measurement.

#### Measure with a picture

It has never been easier to determine an object's width, height, surface area or even its diameter. Only one measurement at the correct angle is needed. Once taken, simply align the two arrows on your screen to the required points in your measurement picture and the result will show. The Pointfinder's 4× zoom, and the device's overview camera, make measuring objects of any size an easy task.

#### **Documentation using pictures**

The camera function on the Leica DISTO™ D810 touch can be used to create pictures or screen shots for recording 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 FTA 360 tripod adapter with fine drive because this adapter allows exact targeting.

#### Flexible data transfer

Set your Leica DISTO<sup>TM</sup> D810 touch to keyboard mode, connect it to your computer and transfer measured values as if you were using your actual keyboard. This option provides a high degree of flexibility.

## Leica DISTO™ S910 + FTA 360-S

# Measure anything from anywhere with P2P Technology





#### **Point to Point Measuring**

Equipped with P2P Technology, the Leica DISTO™ S910 revolutionises measurement using hand-held laser distance meters. The integrated Smart Base enables to measure distances (e.g. widths) between any two points from one location. The combination of the Smart Base and the integrated tilt sensor opens up completely new possibilities making the Leica DISTO™ S910 the most versatile laser distance meter on the market.

#### Capture measurement data in CAD format

A world's first! The Leica DISTO™ S910 can save all the measured points into a dxf file, as a floor plan, wall layout or even as 3D data, which can be downloaded later in the office to a PC via the USB interface. To provide you with complete and reliable documentation, the Leica DISTO™ S910 also stores all the pictures showing where you measured to. This simplifies the task of creating more accurate drawings, or smoothes the process of quality checks.

#### Real-time transfer of point data

Measurement data can be transferred directly on site over the WLAN interface to a laptop to be further processed in your preferred software. Establishing the connection is extremely easy — similar to a hotspot. You can transfer as many measurement points as you like — with or without pictures — and create or check documentation in real-time. The free Leica DISTOTM transfer with Plugin software also supports the transfer of your results into AutoCAD® and BricsCAD®.

#### 300 m range with X-Range Power Technology

The Leica DISTO™ S910 represents the measuring technology of the future with its innovative X-Range Power Technology. It can measure distances of up to 300 m and guarantees quick and reliable measurements, even in bright sunlight or when objects reflect poorly. Range and accuracy are tested in accordance with ISO 16331-1; meaning the Leica DISTO™ S910 delivers on its promises.

## Leica 3D Disto

## Recreating the real world





#### Versatility meets efficiency

The Leica 3D Disto is a robust and precisely manufactured measuring instrument which easily detects the location and height of a target point. Its integral camera precisely determines the position of each chosen point using a highly accurate combination of distance and angle measurements. Those points are then captured by the 3D Disto. You can effortlessly measure and record distances, areas, gradients and angles — even when measurement points aren't easily accessible. Forgotten measurements and handwriting errors are a thing of the past.

#### Room scan

Using the manual or fully automatic mode, you can measure rooms, walls, windows, structural connections or even stairs from just one position.

#### Project to any surface

The Leica 3D Disto can project each individual point of your design onto any surface; whether a ceiling grid or a project layout for floors or walls.

#### **Tool kit**

Many additional functions are part of the Leica 3D Disto's tool kit. For example, you can establish plumb, determine level reference points, or precisely transfer offsets or locations.

## Leica DISTO™ Plan

## Measuring requires documentation



The Leica DISTO<sup>TM</sup> Plan app assists you with the vital task of documenting and visualising your measurements. This way you can easily plan the next steps of your project.

#### Sketch Plan - create a scale drawing

Simply use your fingers to create a sketch on your smartphone or tablet. Then take corresponding measurements and assign them to the relevant lines of you sketch. The app's 'auto-scale' function automatically adjusts the lines' length and the result is a scaled drawing, showing surface area and circumference. It is that easy to produce a CAD ready floorplan.

#### Smart Room — plan while you are measuring

A newly integrated sensor in the Leica DISTO<sup>TM</sup> X3 and X4 makes it possible to create accurate floor plans simply by taking clockwise or counter-clockwise measurements of a room. Once all measurements

are taken, the app automatically generates the plan. Keeping records of each measurement and the angle between any two of those measurements at the same time makes it possible.

#### Measure Plan — create as-build plans for CAD

The Leica DISTO<sup>TM</sup> app supports P2P technology which makes it possible to create detailed floor or wall plans, including doors and windows. Once complete, simply export your plans as a dxf or dwg file into your preferred CAD solution.

#### Sketch on Photo — dimension objects in pictures

Leica DISTO<sup>TM</sup> Bluetooth® Smart technology allows you to assign distance measurements to the appropriate part of a picture taken with your tablet or smartphone. This way you can document all your measurement results and easily process them later in the office.

## The world of measuring apps

## Your access to your software packages



#### Leica DISTO™ transfer

The software Leica DISTO<sup>TM</sup> transfer makes it possible to transfer measurement data directly into AutoCAD® or BricsCAD® on site. This way you can start working within your CAD software straight away and continue to build upon documenting measurement data.

www.disto.com

#### Apps made for Leica DISTO™

Leica DISTO<sup>™</sup> devices are supported by numerous apps which can be downloaded from the App Store or Google Play. Explore the different apps and discover the great opportunities your DISTO<sup>™</sup> provides.







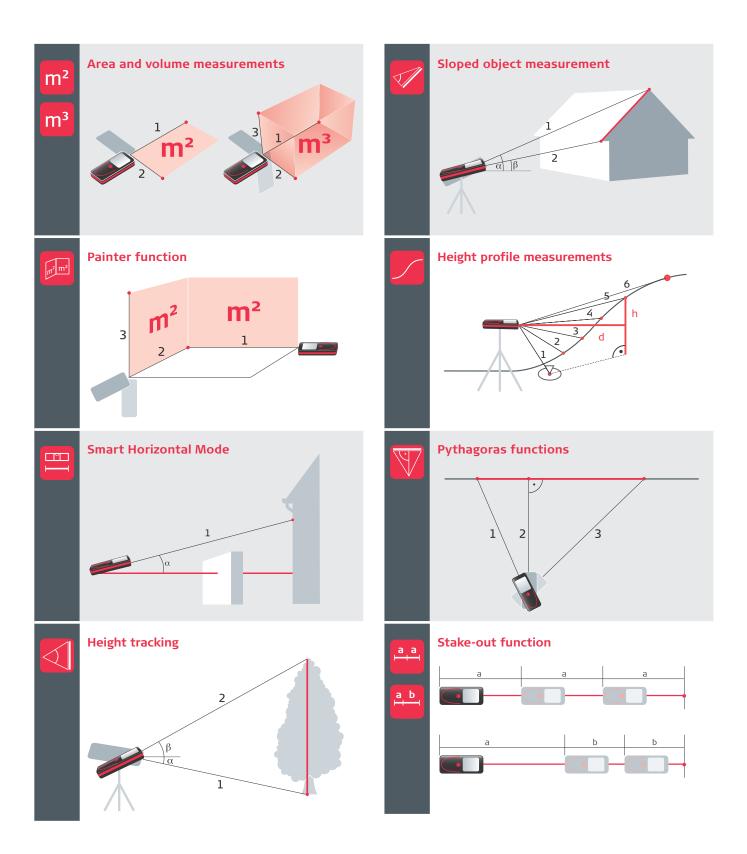


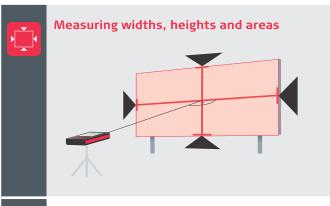


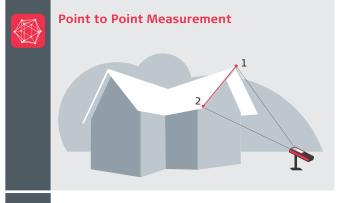


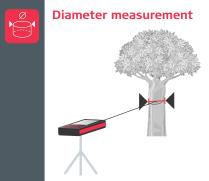


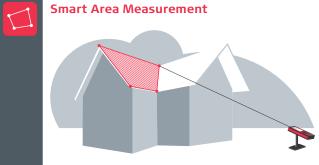
## Any measurements are possible



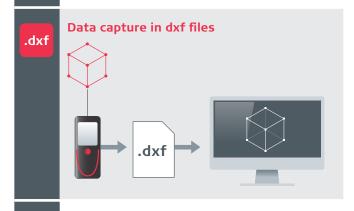


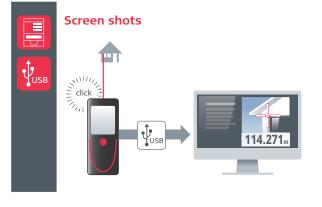


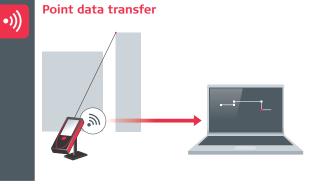












## Leica DISTO™ Original

## accessories

#### Tripods >

Leica TRI 70 • •



The small portable tripod is intended for every-day use. Its features include easy fine adjustment and a bubble level. Extendible length from 0.40 m to 1.15 m. Art. No. 794 963

Leica TRI 100 • •



Quality tripod with bubble level, very easy fine adjustment. Extendible length from 0.70 m to 1.74 m. Art. No. 757 938

Leica TRI 120 •



Twist locks for the legs are making this tripod even more stable. The 180° foldable legs are making it ultimately compact. Ideal for any tripod adapter for all Leica DISTOTM models.

Art. No. 848 788

#### Adapters for DISTO™ >

Leica DST 360



The smart adapter for Leica DISTO™ X3 and X4 making them into a DISTO™ station. It enables P2P measurements with the device or even to a full planning tool with the Leica DISTO™ Plan App. Art. No. 848783

Leica FTA 360-S



Leica FTA 360



Sturdy adapter with fine drive for convenient and precise targeting. The adapter eases the task of targeting, above all over long distances, and results in minimum discrepancies when taking indirect measurements. For use in combination with Leica TRI 70, TRI 100, TRI 120 and TRI 200 tripods.

Art. No. 828414 for Leica DISTO  $^{\text{\tiny{TM}}}$  S910

Art. No. 799301 for Leica DISTO™ D510 and D810 touch

Leica GZM 27



Stick-on target plates for fixing on to edges and corners. Size: 147 × 98 mm. Art. No. 723 774

Leica GZM 26 •



For measurements on poorly reflective surfaces. Two-sided - grey side for shorter distances and brown for longer. Size: 210  $\times$  297 mm.

Art. No. 723 385

Leica GZM 30 •



Stick-on target plates for placing on groundmarks. Size: 274 × 197 mm. Art. No. 766 560

## **Technical data**

Technical data	D1	D110	D2	Х3	X4
Art. No.	843418	808088	837031	850833	855107
Packaging solution Art. No.					
Typ. distance measuring accuracy	± 2.0 mm	± 1.5 mm	± 1.5 mm	± 1.0 mm	± 1.0 mm
Range	0.2 up to 40 m	0.2 up to 60 m	0.05 up to 100 m	0.05 up to 150 m	0.05 up to 150 m
Measuring units	m, ft, in	m, ft, in	m, ft, in	m, ft, in	m, ft, in
X-Range Power Technology	•	•	•	•	•
Distance in m Ø of the laser dot in mm	10 m 6 mm	10, 50 m 6, 30 mm"	10, 50, 100 m 6, 30, 60 mm	10, 50, 100 m 6, 30, 60 mm	10, 50, 100 m 6, 30, 60 mm
Tilt sensor				•	•
Tilt sensor accuracy to the laser beam				± 0.2°	± 0.2°
Tilt sensor accuracy to the housing				± 0.2°	± 0.2°
Units in the tilt sensor				0.0°, 0.00 %	0.0 °, 0.00 %
Smart Base measuring range Horizontal Vertical				360°* -64° to > 90°*	360°* -64° to > 90°*
Distance in m Typ. tolerance of the P2P function				2, 5, 10 m* ± 2, 5, 10 mm*	2, 5, 10 m* ± 2, 5, 10 mm*
Levelling range				± 5° *	± 5° *
Pointfinder with zoom					4 ×
Additional overview camera					
Picture file format					
Memory for pictures					
CAD data format on device					
Memory for CAD files on device					
Memory for last measurements			10	20	20
Display illumination	•	•	•	•	•
Free software for Windows	•	•	•	•	•
Free App for iOS and Android	•	•	•	•	•
Smart Room support				•	•
General data interface	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart
Data interface for 3D point data				Bluetooth® Smart*	Bluetooth® Smart*
Measurements per set of batteries	up to 10,000**	up to 10,000**	up to 10,000**	up to 4,000**	up to 4,000**
Service life of batteries	up to 20 h**	up to 20 h**	up to 20 h**	up to 8 h**	up to 8 h**
Multifunctional endpiece			•	•	•
Automatic reference detection for endpiece			•	•	•
Tripod thread				1/4"	1/4"
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
Charging time					
Protection class	IP 54	IP 54	IP 54	IP 65	IP 65
2 m drop tested				•	•
Dimensions	115 × 43.5 × 23.5 mm	120 × 37 × 23 mm	116 × 44 × 26 mm	132 × 56 × 29 mm	132 × 56 × 29 mm
Weight with batteries	87 g	92 g	100 g	184 g	188 g



in accordance with IEC 60825-1

D510	D810 touch	S910	3D DISTO™
792290	792297	805080	836546
823199 (incl. FTA 360 + TRI 70)	806648 (incl. FTA 360 + TRI 70)	806677 (incl. FTA 360-S + TRI 70)	
± 1.0 mm	± 1.0 mm	± 1.0 mm	
0.05 up to 200 m	0.05 up to 250 m	0.05 up to 300 m	0.5 up to 50 m
m, ft, in	m, ft, in	m, ft, in	m, ft, in
•	•	•	•
10, 50, 100 m 6, 30, 60 mm	10, 50, 100 m 6, 30, 60 mm	10, 50, 100 m 6, 30, 60 mm	10, 30 m 7×7 mm, 9×15 mm
•	•	•	
± 0.2°	-0.1°/+ 0.2°	-0.1°/+ 0.2°	
± 0.2°	± 0.1°	± 0.1°	
0.0°, 0.00 % mm/m, in/ft	0.0°, 0.00 % mm/m, in/ft	0.0°, 0.00 % mm/m, in/ft	
		360° -40° to 80°	360° -80° to > 90°
		2, 5, 10 m ± 2, 5, 10 mm	10, 30, 50 m ± 1, 2, 4 mm
		± 5°	± 3°
4 x	4 ×	4 ×	8 ×
	•	•	
	.jpg	.jpg	.jpg
	80	80	Tablet
		.dxf	.dxf, .dwg
		20 files × 30 points	Tablet
30	30	50	
•	•	•	•
•	•	•	Software included
•	•	•	
Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	WLAN
		WLAN	WLAN
up to 5,000**	up to 4,000**	up to 4,000**	
up to 10 h**	up to 8 h**	up to 8 h**	up to 8 h
•	•	pin	
•	•		
1/4"	1/4"	1/4"	5/8"
type AA 2 × 1.5 V	Li-Ion rechargeable	Li-Ion rechargeable	Li-Ion rechargeable
	4 h	4 h	7 h
IP 65	IP 54	IP 54	IP 54
143 × 58 × 29 mm	164 × 61 × 31 mm	164 × 61 × 32 mm	0 187 × 215.5 mm
198 g	238 g	290 g	2.8 kg

#### Leica DISTO™ sets



Leica DISTO™ S910 set Art. No. 806677



Leica DISTO™ D810 touch set Art. No. 806648



Leica DISTO™ D510 set Art. No. 823199

<sup>\*)</sup> Applies for usage with Leica DST 360 \*\*) reduced when used with Bluetooth®, WLAN or Leica DST 360





#### Extend the warranty of your product

The Leica Geosystems products and Li-Ion batteries meet the highest quality demands. Register your product within 8 weeks of purchase at www.disto.com and benefit from our 3-year warranty, respectively 2-year warranty on Li-Ion batteries.

#### www.disto.com

Dealer stamp	

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- when it has to be **right** 

