

Leica Sprinter

Go ahead...
Push the button



SITE PROOF
by Leica Geosystems

- when it has to be **right**

Leica
Geosystems

Leica Sprinter 50

Aim, Push the Button, Read



1

Aim and Focus

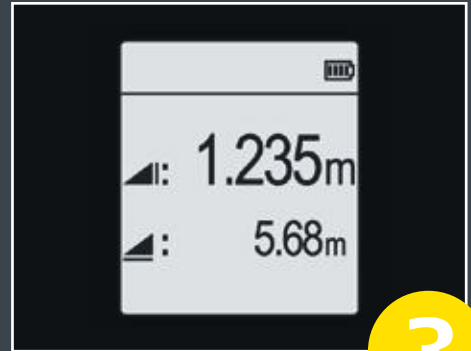
With its high-accuracy optical elements you simply aim and focus the staff as an optical level.



2

Push the Button

With its easy one-button operation, Leica Sprinter does not need any intensive training. Simply push the red button to take the measurement. That's all you need to do.



3

Read

Optical reading is no longer needed. The bar code on the staff determines height and distance which is displayed on a highly visible LCD display. There will be no misreading.

Leica Sprinter 150/150M and 250M Advanced Opportunities

USB interface
(only 150M
and 250M)

User-friendly
menu

Automatic
height
calculation and
delta height

Variety of
levelling
applications



Built-in memory
(only 150M
and 250M)



Multiple languages
available

MENU	
PtID :	2
RL:	99.138m
dH:	-0.900m
▲:	2.135m
▲:	31.11 m

4

Calculate

The Leica Sprinter takes on your calculations. Choose the right application in your language. The correct results will be displayed:

- Delta height
- Line levelling
- Cut & fill
- Tracking & monitoring

(For Sprinter 150 – only delta height and tracking)

MENU	
RECORDING	
Memory	
Off	
Ext.	

5

Memorize

With their built-in memory for storing up to 1'000 points, the Sprinter 150M and 250M avoid transcription errors.

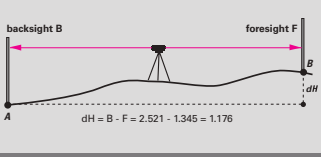
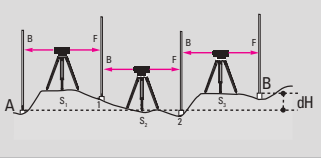
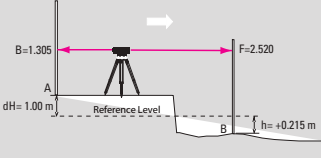
◇	A	B	C	D
4	1	1001	1.540	3.29
5	2	1	1.573	3.28
6	3	2	1.558	10.46
7	4	3	1.585	34.80
8	5	3	1.540	5.69
9	6	4	1.601	2.85
10				
11				
12				
13				
14				
15				
16				
17				

6

Download

With Leica Sprinter 150M and 250M, data can be downloaded to your personal computer via USB Interface. The Sprinter DataLoader enables a smooth data transfer to Microsoft Excel®. Your measurements can also be transferred to an external data collector via RS232 interface.

Leica Sprinter OnBoard Software

<p>Delta height*</p>	 <p>backsight B foresight F</p> <p>$dH = B - F = 2.521 - 1.345 = 1.176$</p>	<p>This function calculates the height difference between points. Enter your benchmark, measure your backsight and then your various targets (foresights). The delta height is always calculated and displayed.</p>
<p>Line levelling**</p>		<p>Whether you only have back and foresights or even intermediate sights, choose the line levelling job you need. Enter your starting benchmark, measure your backsights, intermediate sights and foresights until you have reached your final point. All measurements are stored in the appropriate order.</p>
<p>Cut & fill**</p>	 <p>B=1.305 F=2.520</p> <p>Reference Level</p> <p>$dH = 1.00 \text{ m}$ $h = +0.215 \text{ m}$</p>	<p>This onboard application indicates the cut & fill results based on a reference level. Enter your required reference level and benchmark. Take the backsight and start measuring. The program displays now the cut & fill results, height differences, compared to your reference level.</p>

* 150/150M/250M ** 150M/250M



Technical Data	Sprinter 50	Sprinter 150/150M	Sprinter 250M
Height accuracies	Standard deviation height measurement per 1 km double run (ISO 17123-2)		
-Electronic measurement*	2.0 mm	1.5 mm	1.0/0.7* mm
-Optical measurement	With standard aluminum E-scale/Numeral staff: 2.5 mm		
-Single staff reading	Standard Deviation: 0.6 mm (electronic) and 1.2 mm (optical) at 30 m		
Distance accuracies	Standard deviation distance measurement 10 mm for $D \leq 10 \text{ m}$ and $(\text{Distance in m} \times 0.001)$ for $D > 10 \text{ m}$		
Range	2 – 100 m (electronic)		
Measuring modes	Single and Tracking		
Time for single measurement	< 3 sec		
Compensator	Magnet damped pendulum compensator (range +/- 10 min)		
Telescope	Magnification (optical) 24x		
Data storage	up to 1'000 points (only 150M)	up to 1'000 points	
Environmental conditions	IP55		
Power supply	AA dry cells (4 x LR6/AA/AM3 1.5 V)		
Weight	< 2.5 kg		

* With Sprinter aluminium barcode staff, 0.7 mm can be achieved with Sprinter fibre glass barcode staff (3 m, 1 section)

Leica Sprinter Family

Instrument	Accuracy* per km double-run	Height and distance	Inverse staff reading	Delta height	Tracking	Multilingual function	Line levelling	Cut & fill and monitoring	Data storage & USB interface
Leica Sprinter 50	2.0 mm	✓	✓						
Leica Sprinter 150	1.5 mm	✓	✓	✓	✓	✓			
Leica Sprinter 150M	1.5 mm	✓	✓	✓	✓	✓	✓	✓	✓
Leica Sprinter 250M	1.0 mm/ 0.7 mm*	✓	✓	✓	✓	✓	✓	✓	✓

* With Sprinter aluminium barcode staff, 0.7 mm can be achieved with Sprinter fibre glass barcode staff (3 m, 1 section)



Leica Sprinter 50 for Basic Construction Work

The Sprinter 50 is the perfect levelling tool for your daily levelling tasks. Just aim, focus and measure by pressing one button, the data is displayed almost instantly. There will be no more misreading. Error reducing functions, such as the tilt sensor prevent the system from measuring if the user operates outside the compensator range. You always measure and read error-free!



Leica Sprinter 150 for Automatic Height Calculations

The Sprinter 150 covers almost all construction applications. It automatically determines your delta height. Enter your benchmark, measure the backsight B, measure the foresight F and the result will be displayed instantly. For continuous measurement choose the tracking mode and averaging mode for more accurate results.



Leica Sprinter 150M/250M for Advanced Levelling Work

The Sprinter 150M and 250M are the perfect tools for advanced construction levelling tasks. Store up to 1'000 measurements, download and transfer them for further calculations to Microsoft Excel® to a PC via USB. The delta height calculation and programs line levelling, cut & fill and monitoring facilitates your levelling jobs significantly. The 0.7 mm accuracy of the 250M and the monitoring program allow machine and construction subsidence measurements.



Whether you have to precisely layout a construction site, perform control measurements, collect height and angle data, align concrete forms, install ceilings and partitions, lay gravity flow pipe, locate underground services or complete site preparation and earthworks – Leica Geosystems offers the right instrument, construction laser or machine control installation specifically designed for your construction application.

Easy-to-use, jobsite tough, accurate and reliable – Leica Geosystems instruments and lasers ensure the efficient use of your materials and resources. High quality products, such as optical and electronic levels, construction lasers, total stations and machine automation systems, provide fast results, keep you working and increase your profitability.

When it has to be right.

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Laser Distancemeter



Levels



Lasers



Theodolites

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