

# Leica Sprinter

Go ahead...  
Push the button



- when it has to be **right**

**Leica**  
Geosystems

# Leica Sprinter 50

## Aim, Push the Button, Read

Dust and  
waterproof

Error-free  
height and  
distance results

Out of level  
indication

Compact and  
lightweight  
design

Single button  
operation



1

### Aim and Focus

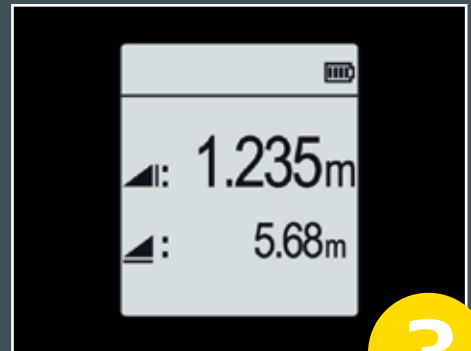
With its high-accuracy optical elements you simply aim and focus the staff as an optical level.



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



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## 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)



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## Memorize

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

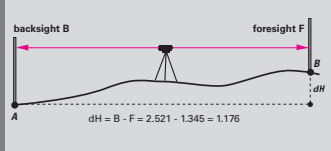
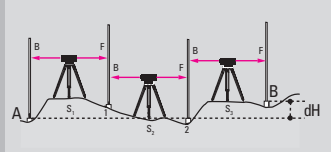
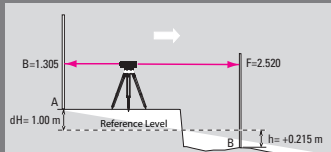
|    | A | B    | C     | D     |
|----|---|------|-------|-------|
| 4  | 1 | 1001 | 1.540 | 3.29  |
| 5  | 2 | 1    | 1.573 | 3.28  |
| 6  | 3 | 2    | 1.558 | 10.46 |
| 7  | 4 | 3    | 1.585 | 34.80 |
| 8  | 5 | 3    | 1.540 | 5.69  |
| 9  | 6 | 4    | 1.601 | 2.85  |
| 10 |   |      |       |   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

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## 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

|                         |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                          |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Delta height*</b>    |  <p>backsight B      foresight F</p> <p><math>dH = B - F = 2.521 - 1.345 = 1.176</math></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.                                                                                             |
| <b>Line levelling**</b> |  <p>backsight B      foresight F</p> <p><math>dH = B - F = 2.521 - 1.345 = 1.176</math></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. |
| <b>Cut &amp; fill**</b> |  <p>Reference Level</p> <p><math>dH = 1.00 \text{ m}</math>      <math>F = 2.520</math>      <math>h = +0.215 \text{ m}</math></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.                  |

\* 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*<br>per km | Height and<br>distance | Inverse staff<br>reading | Delta height | Tracking | Multilingual<br>function | Line levelling | Cut & fill and<br>monitoring | Data storage<br>& USB |
|------------------------|---------------------|------------------------|--------------------------|--------------|----------|--------------------------|----------------|------------------------------|-----------------------|
| Leica<br>Sprinter 50   | 2.0 mm              | ✓                      | ✓                        |              |          |                          |                |                              |                       |
| Leica<br>Sprinter 150  | 1.5 mm              | ✓                      | ✓                        | ✓            | ✓        | ✓                        |                |                              |                       |
| Leica<br>Sprinter 150M | 1.5 mm              | ✓                      | ✓                        | ✓            | ✓        | ✓                        | ✓              | ✓                            | ✓                     |
| Leica<br>Sprinter 250M | 1.0 mm/<br>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.**

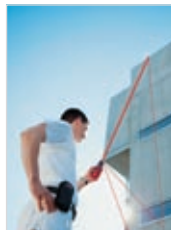
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**Lasers**



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