

Leica LS Digital Levels

Data sheet



Precise hardware

Automated functions and industry-leading 0.2 mm accuracy to standard Invar staffs deliver unmatched reliability. Precision begins by using the electronic level bubble to set up instruments. After one button press, automatic tilt checks are made prior to each measurement. Integrated autofocus not only finds your target faster, it increases measurement accuracy by maximising contrast of the staff.



Infinitely bridging field to office

The comfortable field experience of Leica LS digital levels isn't finished in the field. After easily transferring your data to the office, Leica Infinity processes your results hassle-free back in the office. This intuitive software enables easy-to-understand displays of complex levelling data. Combine tables with graphics or even cross check project data in one window for an overall view of level lines, line calculations or adjustments.

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Customer care only a click away

Through Active Customer Care (ACC), a global network of experienced professionals is ready to expertly guide you through any challenge. Eliminate delays with superior technical service, and finish jobs faster and avoid costly site revisits with excellent consultancy support. Control your costs with a tailored Customer Care Package (CCP), giving you peace of mind you are covered anywhere, anytime.

Leica LS10 & LS15 Digital Levels



Leica LS10



Leica LS15

HEIGHT MEASUREMENT

Accuracy ¹ using standard Invar staff	0.3 mm	0.2 mm, 0.3 mm
Accuracy ² using standard staff	1.0 mm	1.0 mm

DISTANCE MEASUREMENT

Accuracy ³	15 mm at 30 m	15 mm at 30 m
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MEASUREMENT RANGE

Minimum range	1.8 m	1.8 m
Maximum range ⁴	110 m	110 m
Measurement time	Typically 2.5 sec	Typically 2.5 sec

AUTOFOCUS

Working range	X	1.8 m to infinity
Time to focus	X	Typically 4 sec

OVERVIEW CAMERA

Field of view	X	6° x 4.8° (7.7° diagonal)
Frame rate	X	Up to 20 frames per second
Focus	X	3 m to infinity

DIGITAL COMPASS

Accuracy ⁶	X	3 gon / 2.7°
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COMPENSATOR

Working range	± 9'	± 9'
Accuracy ⁶	0.3''	0.3''
Magnetic field sensitivity ⁵	≤ 1''	≤ 1''

INTERFACES

RS232 / USB	X	✓
Bluetooth®	✓	✓
Mini USB	✓	✓

DATA STORAGE

Internal memory	30,000 measurements	30,000 measurements
USB stick	✓	✓

GENERAL

Display	3.6 inches, QVGA, colour, touch	3.6' inches, QVGA, colour, touch
Telescope magnification	32 x	32 x
Minimum focusing distance	0.6 m	0.6 m
Electronic level bubble (Longitudinal and Transversal tilt)	✓ ⁷ Working range ± 9'	Working range 0.1100 gon / 0.099° Accuracy ⁶ 0.015 gon / 0.013°
Weight (including battery)	3.7 kg	3.9 kg
Internal battery / operating time	Exchangeable Lithium-Ion / 12 h	Exchangeable Lithium-Ion / 10 - 12 h
External power	X	12.8 V DC (10.5-18 V)

ENVIRONMENTAL SPECIFICATIONS

Working temperature range	-20 °C to +50 °C	-20 °C to +50 °C
Dust / Water (IEC 60529)	IP55	IP55
Humidity	95%, non-condensing	95%, non-condensing

1 - Standard deviation, 1 km double run, ISO 17123-2. GPCL3 standard Invar staff or equivalent.

2 - Standard deviation, 1 km double run, ISO 17123-2. GKNL4M standard staff or equivalent.

3 - Standard deviation, 500 ppm for up to 50 m, 1000 ppm for distances beyond 50 m.

4 - For standard staffs exceeding 3 m length, 60 m for Invar staffs.

5 - Line of Sight difference in constant magnetic field between 0 and ±400 µT.

6 - Standard deviation.

7 - Longitudinal tilt only

✓ Standard X Not Available

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www.leica-geosystems.com

- when it has to be **right**

Leica
Geosystems

Leica LS Digital Levels

Outstanding comfort,
accurate results



- when it has to be **right**



Leica LS Digital Levels – More comfort with exceptionally **reliable** results

Today's complex infrastructure requires the highest accuracy when setting out and defining reference heights. Only the most experienced measuring professionals are trusted with this demanding but often tedious task. Years of experience has led Leica Geosystems to understand what professionals need to get highly focused tasks done reliably on a daily basis. Now, a digital level has been created providing comfort and accuracy never before experienced when working on such challenging projects. Leica LS Digital Levels offer the ease of automated functions with industry-leading 0.2 mm accuracy to complete fast and reliable data collection of projects. Just point at your target and with one button press, all steps of levelling will be completed with automated ease.

Profit from Leica Geosystems' experience as inventors and industry leaders of digital levels. With a commitment to striving forward, we have perfected this instrument to offer you an enjoyable field experience, helping to relieve human fatigue. From measuring structures, roads, railways or bridges to authoritative first-order levelling work, Leica LS digital levels add comfort to a wide range of complex levelling applications.



DIGITAL CAMERA AIMING



AUTOFOCUS EFFICIENCY



QUICK SETUP



EASY DATA TRANSFER



USE STANDARD INVAR STAFF

HIGHEST ACCURACY

- 0.2 mm accuracy even with standard Invar staffs
- Electronic level bubble for perfect instrument setup
- Tilt check prior to each measurement
- Autofocus for maximal contrast of staff

EFFICIENCY OF WORK

- Digital camera enables fast and accurate staff sighting
- Streamline levelling processes with just one push of a button
- Fast and easy data transfer using USB and Bluetooth® connectivity

FIELD EXPERIENCE

- Visualisation of level lines in the field and in the office
- Screenshots document site and field results
- Step-by-step display guidance for levelling line flows

LEICA GEOSYSTEMS' KNOW-HOW

- Over 25 years experience in developing digital levels
- Receive support for challenging levelling tasks from industry leaders



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Comfort doesn't end in the field

Leica Infinity office software suite offers user-friendly handling and seamless transfers of levelling data. Image-supported, dedicated views make post-processing hassle free. Easily zoom in and out to see the overall data views of levelling lines, line calculations and adjustments. With just a few clicks, Leica Infinity's extremely intuitive user interface lets you combine text or tables with graphics of complex levelling data or even cross check projects, in just one window. All project data, processed results and deliverables are accessible whenever you need them – and with absolute precision.



Leica Geosystems - when it has to be right.

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems creates complete solutions for professionals across the planet. Known for valuable products and innovative solution development, professionals in a diverse mix of industries, such as aerospace and defence, safety and security, construction, and manufacturing, trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and dependable services, Leica Geosystems delivers value every day to those shaping the future of our world.

Leica Geosystems is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications.



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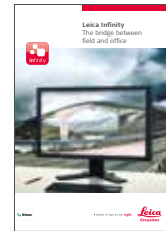
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Leica Viva TS16



Leica Viva GS14



Leica Infinity



Leica Original Accessories