

# 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.

### ACC»

### 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 <sup>1</sup> using standard Invar staff	0.3 mm	0.2 mm, 0.3 mm
Accuracy <sup>2</sup> using standard staff	1.0 mm	1.0 mm
Resolution height measurement	0.01 mm, 0.00001ft	0.01 mm, 0.00001ft

## MEASUREMENT RANGE

Minimum range	1.8 m	1.8 m
Maximum range <sup>4</sup>	110 m	110 m
Measurement time	Typically 2.5 sec	Typically 2.5 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 <sup>6</sup>	X	3 gon / 2.7°
-----------------------	---	--------------

## COMPENSATOR

Working range	± 9'	± 9'
Accuracy <sup>6</sup>	0.3"	0.3"
Magnetic field sensitivity <sup>5</sup>	≤ 1"	≤ 1"
Type	Pendulum compensator with magnetic damping	Pendulum compensator with magnetic damping
Slope range	± 10'	

## 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	X	Working range 0.07 gon / 0.063° Accuracy <sup>6</sup> 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.

✓ Standard X Not Available

The Bluetooth® trademarks are owned by Bluetooth SIG, Inc.

Illustrations, descriptions and technical data are not binding. All rights reserved.

Printed in Switzerland. Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2015.

841877en - 10.15 - INT