

Leica Viva Uno GNSS handhelds Datasheet



Reliable Data and Measurements

High quality measurement engine and proven antenna technology provide the highest quality measurement data.

- 14 channel L1 GPS, GLONASS, SBAS sensor
- Post processing accuracy 5 mm + 0.5 ppm (2D)
- DGPS accuracy < 0.4 m
- Leica MDB and RINEX raw data logging



Simply productive Surveying Software

With clear graphics, non-technological terminology and simplified workflows SmartWorx Viva is incredibly easy to use.

- Survey, coding and line work
- Advanced coordinate system handling
- Wide range of apps for all surveying and staking tasks

IP67

Simply productive Surveying Software

Packed with features and designed for use in extreme environments.

- IP67, operating temperature -30 to +60° C
- SD and CF cards and USB stick support
- GSM/UMTS, WLAN, Bluetooth and camera integrated

Technical Specifications

Leica Viva Uno 10/15 GNSS sensor

Ergonomic and cable-free GNSS handheld		Uno 10	Uno 15
Operating system	Windows CE 6.0	●	●
Display	8.9 cm (3.5 in) 640 x 480 pixel (VGA) color TFT, touch screen, sunlight-readable, LED backlight	portrait	landscape
Camera	Integrated 2 MPixel fixed focus camera	●	●
I/O	SD slot (SDIO), CF Type I / II slot, 5-pin custom connector (USB) RS232 module: RS232, USB A Host, USB Mini AB OTG, 7-pin connector, Power Lemo module: Lemo (USB and serial), USB A Host, 7-pin connector, Power	● ○ ○	● ○ ○
Interface	Touch screen, ergonomic cable-free handheld, numeric or QWERTY keyboard, virtual keyboard	Numeric 26 keys	QWERTY 65 keys
Processor	Freescall iMX31 533 MHz ARM Core	●	●
Memory	512 MB DDR SDRAM	●	●
Storage	1 GB (non-volatile NAND Flash)	●	●
Audio	Integrated sealed speaker and microphone	●	●
LEDs	Battery and <i>Bluetooth</i> ® status LED	●	●
Wireless connectivity	Integrated <i>Bluetooth</i> ® 2.0 Class 2 Integrated 802.11 b/g WLAN module Integrated GSM/UMTS 3.5G module	● ○ ○	● ○ ○
Software			
Application software	Viva Controller runs Leica SmartWorx Viva and SmartWorx Viva LT. In addition, a number of regional solutions are available. For more information on the field software that's best for you, contact your local Leica authorized distribution partner.	○	○
Standard software	Internet Explorer Mobile, File Explorer, Word Mobile, Microsoft Windows Media™ Player, Camera Software, Online Help	●	●
Power Management			
Removable battery	GEB212 (7.4 V / 2600 mAh Li-Ion rechargeable)	●	●
Battery charging time	2 hours	●	●
Power	Nominal 12 V DC, Range 10.5 – 28 V DC	●	●
Operating time	10 hours (depending on use of embedded devices)	●	●
Dimensions and Weight			
Size	Uno 10: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1.77 in) Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1.77 in)	●	●
Weight ¹	Uno 10: 0.74 kg (1.63 lbs) Uno 15: 0.90 kg, (1.98 lbs)	●	●
Environmental Specifications			
Operating / Storage temperature range	Operation: –30 to 60° C, Storage: –40 to 80° C, compliance with ISO9022-10-08, ISO9022-11-special, MIL STD 810G Method 502.5 II/I, MIL STD 810G Method 501.5 II/I	●	●
Dust and Water / Humidity	IP67, compliance with IEC60529 and MIL STD 810G Method 506.5 I, MIL STD 810G Method 510.5 I and MIL STD 810G Method 512.5 I / 100 %, compliance with ISO9022-13-06, ISO9022-12-04 and MIL STD 810G Method 507.5 I	●	●
Drop / Vibration	1.2 m ² / ISO9022-36-05 and MIL STD 810G Method 514.6-Cat.24	●	●
GNSS – integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna			
Channels	GNSS satellite channels	14	14
GNSS	GPS Glonass	● ○	● ○
Integrated real-time	SBAS (WAAS, EGNOS, MSAS, GAGAN) ³	○	○
External antenna	Connector for an external antenna	●	●
Real-time and post-processed	Support of real-time correction service and post-processing to achieve <40 cm positioning accuracy	●	●
Update rate	Position and raw data logging update rate	5 Hz	5 Hz
Time to first fix (typical)	Frozen Start 120 sec, Hot Start 35 sec	●	●
Real-time protocols	Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+	●	●
Post-processed accuracy ⁴ (rms)	Code differential (DGPS / RTCM): <0.4 m Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mm + 0.5 ppm Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20 mm + 1 ppm	●	●
Real-time accuracy (SBAS or external source) ⁴	SBAS <1.0 m, DGPS typically <0.4 m (rms) compliant to ISO 17123-8 standard	●	●
Accessories ⁵			
Anti-glare screen protectors (2-pack), Stylus		●	●
100 – 240 V AC power supply for all regions		●	●
AS05 external antenna, pole-mountable bracket, 2 meter range pole		○	○

¹ Without battery 110 g

² Onto plywood over concrete

³ WAAS available in North America only, EGNOS available in Europe only, GAGAN available in India only, and MSAS available in Japan only

⁴ Position accuracy depends on available sat, proximity to base station, multipath effects, used antenna, etc. Max. baseline length depends on atmospheric conditions.

⁵ For more information on accessories contact your local Leica authorized distribution partner.

● = Standard

○ = Optional



The **Bluetooth**® word mark and logos are owned by Bluetooth SIG, Inc. and any use of such marks by Leica Geosystems AG is under license.

Windows CE, Internet Explorer Mobile, File Explorer, Word Mobile & Windows Media Player are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Other trademark and trade names are those of their respective owners.

Illustrations, descriptions and technical data are not binding. All rights reserved. Printed in Switzerland – Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2012. en-us – 07.14 – galledia

Leica Geosystems AG
Heerbrugg, Switzerland

www.leica-geosystems.com

- when it has to be **right**

