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 linework
- Advanced coordinate system handling
- Wide range of apps for all surveying and staking tasks

Built for the Field

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

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Leica Geosystems

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) colour 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	Freescale 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 *Bluetooth*® status LED	●	●
Wireless connectivity	Integrated *Bluetooth*® 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

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