# **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



# 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**

For more information on the field software that's best for   Internet Explorer Mobile, File Explorer, Word Mobile, Micros   Power Management	Uno 10	Uno 1
Bisplay	•	•
Integrated 2 MPykel fixed focus camera  //O  SD slot (SDIO), CF Type I / II slot, 5-pin custom connector (US R323 moduler R5232, USB A Host, USB Mini AB OTG, 7-pin Lemo moduler. Lemo (USB and serial), USB A Host, 7-pin con moterface  Touch screen, ergonomic cable-free handheld, numeric or QV forecessor  Freescale IMX31 533 MHz ARM Core  Freescale IMX31 533 MHz Extremely Image of Extremely IMX	sunlight-readable, LED backlight portrait	landso
SD slot (SDIO), CF Type I / II slot, 5-pin custom connector IUS RS23 module: RS232, USB A Host, USB Mini AB OTG, 7-pin custom connector IUS RS232 module: RS232, USB A Host, USB Mini AB OTG, 7-pin custom module: Lemo module: Lemo IUSB and serial, USB A Host, 7-pin custom connector IUS RS232 module: RS232, USB A Host, USB Mini AB OTG, 7-pin custom connector IUS Mini	Summight readable, EED backinght	Idilasc
RS232 module: RS232, USB A Host, USB Mini AB OTG, 7-pin Lemo module: Lemo (USB and serial), USB A Host, 7-pin conterface  Touch screen, ergonomic cable-free handheld, numeric or Q Processor  Freescale IMX31 533 MHz ARM Core  Freescale IMX31 533 MHz ARM Core  S12 MB DDR SDRAM  1 GB (non-volatile NAND Flash)  Integrated sealed speaker and microphone  Battery and Bluetooth* 2.0 class 2 Integrated 80.211 b/g WLAN module Integrated 80.211 b/g WLAN module Integrated GSM/UMTS 3.5G module  For more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for more information on the field software that's best for Nominal 12 V DC, Range 10.5 – 28 V DC  Difference of the process	-	•
Touch screen, ergonomic cable-free handheld, numeric or Quercessor  Are processor		
Freescale iMX3 1 533 MHz ARM Core  Alemory  512 MB DDR SDRAM  1 GB (non-volatile NAND Flash)  Integrated sealed speaker and microphone  Battery and Bluetooth* 2 tatus LED  Wireless connectivity  Integrated Bluetooth* 2 tatus LED  Integrated Bluetooth* 2 tatus L	ector, Power o	С
Storage 1 GB (non-volatile NAND Flash)  Audio Integrated sealed speaker and microphone  Battery and Bluetooth* status LED  Mireless connectivity Integrated Bluetooth* 2.0 Class 2 Integrated 802.11 b/g WLAN module Integrated 802.11 b/g WLAN module Integrated Sown Status LED  Mireless connectivity Integrated 802.11 b/g WLAN module Integrated Sown Status LED  Mireless connectivity Integrated 802.11 b/g WLAN module Integrated GSM/UMTS 3.5C module  Software  Application software  Application software  Viva Controller runs Leica SmartWorx Viva and SmartWorx For more information on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Status Charles on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Status Charles on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Status Charles on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Carles on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Carles on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Carles on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Carles on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Carles on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Status of Carles on the field software that's best for Internet Status LED  Integrated Education on the field software that's best for Internet Status on the field software that's best for Internet Status LED  Integrated Relation on the field software that's best for Internet Status Left Status on the field software that's best for Internet Status on the field software that's best for Internet Status Lef	ERTY keyboard, virtual keyboard Numeric 26 keys	100
1 GB (non-volatile NAND Flash)	•	•
Integrated sealed speaker and microphone  Bos Battery and Bluetooth** status LED  Integrated Bluetooth** 2.0 Class 2 Integrated GS.11 b/g WLAN module Integrated GS.11 b/g WLAN module Integrated GSM/UMTS 3.5G module  Over Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Ower Management  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Internet Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Internet Internet Explorer And Internet Explorer And Internet	•	•
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Battery and Bluetooth® status LED  Integrated Bluetooth® 2.0 Class 2 Integrated Bluetooth® 2.0 Class 2 Integrated Bluetooth® 2.0 Class 2 Integrated SWUMAN module Integrated SWUMAN module Integrated SWUMAN module Integrated SWUMAN status LED  Viva Controller runs Leica SmartWorx Viva and SmartWorx For more information on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros  Vower Management  Vermovable battery  GEB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Vermovable battery  GEB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Vermovable battery  Vermovable batt	•	
Integrated Bluetooth* 2.0 Class 2 Integrated 802.11 b/g WLAN module Integrated 402.11 b/g WLAN module Integrated 55M/UMTS 3.5G	•	
Integrated S02.11 b/g WLAN module Integrated CSM/UMTS 3.5G module  Integrated CSM/UMTS 3.5G module  Viva Controller runs Leica SmartWorx Viva and SmartWorx For more information on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Controller runs Leica SmartWorx Viva and SmartWorx For more information on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, File Explorer, Word Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, File Explorer, Word Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, File Explorer, Word Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, File Explorer, Word Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, File Explorer, Word Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, File Explorer, Word Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Viva Charley Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion Rechargeable)  Viva Charley Mobile, Micros Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion Rechargeable)  Viva Charley Mobile, Micros Viva Mobile, Micros Viva Mobile, Micros Viva CBB212 (7.4 V / 2600 mAh Li-Ion Rechargeable)  Viva Charley Mobile, Micros Viva Mobile, Micros	•	
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Viva Controller runs Leica SmartWorx Viva and SmartWorx For more information on the field software that's best for Internet Explorer Mobile, File Explorer, Word Mobile, Micros Owner Management  Removable battery  Jattery charging time  Jower Mominal 12 V DC, Range 10.5 – 28 V DC  Departing time  Jower Mominal 12 V DC, Range 10.5 – 28 V DC  Departing time  Juno 10: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 0.90 kg, (1.98 lbs)  Antironmental Specifications  Departing / Storage temperature range  Operating / Storage temperature range  Operating / Storage temperature range  Operating / Storage with IEC60529 and MIL STD 810G Method 502.5 III/  IP67, compliance with IEC60529 and MIL STD 810G Method 502.5 III/  IP67, compliance with IEC60529 and MIL STD 810G Method 502.5 III/  Storage - Integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna  Constance - Integrated real-time  Constance - SBAS (WAAS, EGNOS, MSAS, GAGAN) <sup>3</sup> Constance - SBAS (WAAS, EGNOS, MSAS, GAGAN) <sup>3</sup> Connector for an external antenna  Real-time and post-processed  Support of real-time correction service and post-processing operating time and post-processed  Departing of the service o	0	
For more information on the field software that's best for tandard software  Internet Explorer Mobile, File Explorer, Word Mobile, Micros tower Management  Jemovable battery  GEB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  Jattery charging time  2 hours  Nominal 12 V DC, Range 10.5 – 28 V DC  Joperating time  10 hours (depending on use of embedded devices)  John 15: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 10: 0.74 kg (1.63 lbs)  Jon 15: 0.90 kg, (1.98 lbs)  Invironmental Specifications  Operating / Storage temperature range  Operating / Storage temperature range  Operation: –30 to 60° C, Storage: –40 to 80° C, compliance with IEC60529 and MIL STD 810G Method 501.5 II/I  JP67, compliance with IEC60529 and MIL STD 810G Method 512.5 I / 100 %, compliance with ISO9022-13-06 and MIL STD 810G Method 514.6 (Inc.)  Joseph / Vibration		
removable battery  GEB212 (7.4 V / 2600 mAh Li-Ion rechargeable)  attery charging time  2 hours  Nominal 12 V DC, Range 10.5 – 28 V DC  Operating time  10 hours (depending on use of embedded devices)  Dimensions and Weight  Uno 10: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 0.90 kg, (1.98 lbs)  Invironmental Specifications  Operating / Storage temperature range  Operating / Storage temperature range  Operation: -30 to 60° C, Storage: -40 to 80° C, compliance Method 502.5 II/I, MIL STD 810G Method 501.5 II/I  Ple7, compliance with IEC60529 and MIL STD 810G Method 501.5 II/I  Ple7, compliance with IEC60529 and MIL STD 810G Method 514.6 Method 512.5 I / 100 %, compliance with ISO9022-13-06 and MIL STD 810G Method 514.6 Method 512.5 I / 100 %, compliance with ISO9022-13-06 and MIL STD 810G Method 514.6 Method 512.5 I / 100 %, compliance with ISO9022-13-06 and MIL STD 810G Method 514.6	va LT. In addition, a number of regional solutions are available.  ou, contact your local Leica authorized distribution partner.	(
Removable battery  GEB212 (7.4 V / 2600 mAh Li-lon rechargeable) Retail (2 hours)  Remover  Nominal 12 V DC, Range 10.5 - 28 V DC  Deparating time  10 hours (depending on use of embedded devices)  Dimensions and Weight  Uno 10: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 0.74 kg (1.63 lbs) Uno 15: 0.90 kg, (1.98 lbs)  Remover (1.98 lbs)  Deparating / Storage temperature range  Operation: -30 to 60° C, Storage: -40 to 80° C, compliance Method 502.5 II/I, MIL STD 810G Method 501.5 II/I  Ple7, compliance with IEC60529 and MIL STD 810G Method 501.5 II/I  Ple7, compliance with IEC60529 and MIL STD 810G Method 514.6 Method 512.5 I / 100 %, compliance with IS09022-13-06 and MIL STD 810G Method 514.6 Method 512.5 I / 100 %, compliance with IS09022-13-06 and MIL STD 810G Method 514.6 Metho	ft Windows Media™ Player, Camera Software, Online Help •	
Anterly charging time  2 hours  Nominal 12 V DC, Range 10.5 – 28 V DC  Deparating time  10 hours (depending on use of embedded devices)  Dimensions and Weight  IVO 10: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 10: 0.74 kg (1.63 lbs)  Uno 10: 0.74 kg (1.63 lbs) Uno 15: 0.90 kg, (1.98 lbs)  INVIRONMENTAL Storage temperature range  Operation: –30 to 60° C, Storage: –40 to 80° C, compliant Method 502.5 II/I, MIL STD 810G Method 501.5 II/I  Plost and Water / Humidity  IP67, compliance with IEC60529 and MIL STD 810G Method 512.5 I / 100 %, compliance with IS09022-13-06  Prop / Vibration  I.2 m² / IS09022-36-05 and MIL STD 810G Method 514.6  INSS – integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna  Cansos – integrated real-time  SBAS (WAAS, EGNOS, MSAS, GAGAN)³  Integrated real-time  SBAS (WAAS, EGNOS, MSAS, GAGAN)³  Integrated rate  Position and raw data logging update rate  Ime to first fix (typical)  Frozen Start 120 sec, Hot Start 35 sec  Integrated Frozen Start 120 se		
Nominal 12 V DC, Range 10.5 – 28 V DC  Operating time  10 hours (depending on use of embedded devices)  Dimensions and Weight  Dividence of the second of th	•	
Departing time   10 hours (depending on use of embedded devices)	•	
Uno 10: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 0.74 kg (1.63 lbs) Uno 15: 0.90 kg, (1.98 lbs)  Invironmental Specifications  Operating / Storage temperature range  Operation: —30 to 60° C, Storage: —40 to 80° C, compliant Method 502.5 II/I, MIL STD 810G Method 501.5 II/I  Oust and Water / Humidity  IP67, compliance with IEC60529 and MIL STD 810G Method Method 512.5 I / 100 %, compliance with IS09022-13-06  Orop / Vibration  1.2 m² / IS09022-36-05 and MIL STD 810G Method 514.6  INSS — integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna  Channels  GNSS satellite channels  GNSS satellite channels  GNSS satellite channels  Connector for an external antenna  Connector for an external antenna  Connector for an external antenna  Eval-time and post-processed  Support of real-time correction service and post-processin polydate rate interest first fix (typical)  Frozen Start 120 sec, Hot Start 35 sec  Eval-time protocols  Code differential (DGPS / RTCM): <0.4 m  Static (phase): Horizontal 10 mm + 1 ppm, Vertical 10 mm Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  SEAS <1.0 m, DGPS typically <0.4 m (rms) compliant to IS	•	
Uno 10: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1 Uno 15: 0.74 kg (1.63 lbs) Uno 15: 0.90 kg, (1.98 lbs)  Environmental Specifications  Operating / Storage temperature range  Operating / Storage range range  Oper	•	
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Uno 15: 0.90 kg, (1.98 lbs)  Environmental Specifications  Operating / Storage temperature range Operating / Storage temperature with ISO 80° C, compliance with ISO 80.1.5 II/I IP67, compliance with IEC60529 and MIL STD 810G Method 501.5 II/I IP67, compliance with IEC60529 and MIL STD 810G Method 514.6 INSS - Integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna Channels GNSS satellite channels GNSS satellite channels GNSS satellite channels GPS Glonass Integrated real-time SBAS (WAAS, EGNOS, MSAS, GAGAN)³ Operating operati	' '	
Operation: –30 to 60° C, Storage: –40 to 80° C, compliance Method 502.5 II/I, MIL STD 810G Method 501.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and MIL STD 810G Method 512.5 II/I P67, compliance with IEC60529 and Mil STD 810G Method 512.5 II/I P67, compliance with IEC60529 and Mil STD 810G Method 512.5 II/I P67, compliance with IEC60529 and Mil STD 810G Method 512.5 II/I P67, compliance with IEC60529 and Mil STD 810G Method 512.5 II/I P67, compliance with IEC60529 and Mil STD 810G Method 512.5 II/I P67, compliance with IEC60529 and Mil STD 810G Method 512.5 II/I P67, compliance with IEC60529 and Mil STD 810G Method 512.5 II/I P67, compliance with IEC60529 and Mil STD 810G Metho	•	
Operation: –30 to 60° C, Storage: –40 to 80° C, compliant 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 512.5 I / 100 %, compliance with ISO9022-13-06 Drop / Vibration  1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 GINSS – integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna GINSS integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna GINSS GINSS  GPS Glonass  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-processin Update rate  Frozen Start 120 sec, Hot Start 35 sec  Real-time protocols  Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+  Post-processed accuracy4 (rms)  Code differential (DGPS / RTCM); <0.4 m  Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mm Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20 GRal-time accuracy (SBAS or external source)4  SBAS <1.0 m, DGPS typically <0.4 m (rms) compliant to IS		
Method 512.5 I / 100 %, compliance with ISO9022-13-06 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO902-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO902-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO902-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO902-36-05 and MIL STD 810G Method 514.6 prop / Vibration 1.2 m² / ISO902-36-	with ISO9022-10-08, ISO9022-11-special, MIL STD 810G	
Topy / Vibration  1.2 m² / ISO9022-36-05 and MIL STD 810G Method 514.6  GNSS - integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna  Channels  GNSS satellite channels  GNSS satellite channels  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-processin  Update rate  Position and raw data logging update rate  Firme 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+  Code differential (DGPS / RTCM): <0.4 m  Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mr  Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  Real-time accuracy (SBAS or external source)⁴  SBAS <1.0 m, DGPS typically <0.4 m (rms) compliant to IS		1
Integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna Integrated high-performance GNSS (GPS, Glonass and SBAS) receiver and L1 Antenna Integrated real-time GNSS satellite channels  GPS Glonass Integrated real-time SBAS (WAAS, EGNOS, MSAS, GAGAN) <sup>3</sup> Integrated real-time Connector for an external antenna Integrated real-time and post-processed Integrated Position and raw data logging update rate Integrated Position and raw dat	Cat.24	
Channels  GNSS satellite channels  GPS Glonass  stegrated real-time  SBAS [WAAS, EGNOS, MSAS, GAGAN]³  xternal antenna  Connector for an external antenna  ceal-time and post-processed  Support of real-time correction service and post-processin  plotate rate  position and raw data logging update rate  ime to first fix (typical)  Frozen Start 120 sec, Hot Start 35 sec  teal-time protocols  Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+  cost-processed accuracy⁴(rms)  Code differential (DGPS / RTCM): <0.4 m  Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mr  Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  teal-time accuracy (SBAS or external source)⁴  SBAS <1.0 m, DGPS typically <0.4 m (rms) compliant to IS		
GPS Glonass  stegrated real-time  SBAS (WAAS, EGNOS, MSAS, GAGAN)³  connector for an external antenna  connector for an external antenna  eal-time and post-processed  Support of real-time correction service and post-processing plate rate  position and raw data logging update rate  ime to first fix (typical)  Frozen Start 120 sec, Hot Start 35 sec  eal-time protocols  Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+  ost-processed accuracy⁴ (rms)  Code differential (DGPS / RTCM): <0.4 m  Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mm  Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  eal-time accuracy (SBAS or external source)⁴  SBAS <1.0 m, DGPS typically <0.4 m (rms) compliant to IS	14	]
Glonass  stegrated real-time  SBAS (WAAS, EGNOS, MSAS, GAGAN)³  ceal-time and post-processed  Support of real-time correction service and post-processing plate rate  Position and raw data logging update rate  ime to first fix (typical)  Frozen Start 120 sec, Hot Start 35 sec  seal-time protocols  Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+  cost-processed accuracy⁴ (rms)  Code differential (DGPS / RTCM): < 0.4 m  Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mm  Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  seal-time accuracy (SBAS or external source)⁴  SBAS < 1.0 m, DGPS typically < 0.4 m (rms) compliant to IS	•	
ceal-time accuracy (SBAS or external source) <sup>4</sup> Connector for an external antenna  Connector for an external antenna  Support of real-time correction service and post-processing plate rate  Position and raw data logging update rate  Frozen Start 120 sec, Hot Start 35 sec  Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+  Code differential (DGPS / RTCM): < 0.4 m  Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mm  Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  SBAS < 1.0 m, DGPS typically < 0.4 m (rms) compliant to IS	0	(
Support of real-time correction service and post-processing plate rate  Position and raw data logging update rate frozen Start 120 sec, Hot Start 35 sec  Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+  cost-processed accuracy4 (rms)  Code differential (DGPS / RTCM): < 0.4 m  Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mm  Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  SBAS < 1.0 m, DGPS typically < 0.4 m (rms) compliant to IS	0	
Position and raw data logging update rate	•	
Position and raw data logging update rate	to achieve < 40 cm positioning accuracy	
ime to first fix (typical) Frozen Start 120 sec, Hot Start 35 sec Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+  ost-processed accuracy <sup>4</sup> (rms)  Code differential (DGPS / RTCM): < 0.4 m Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mr Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  seal-time accuracy (SBAS or external source) <sup>4</sup> SBAS < 1.0 m, DGPS typically < 0.4 m (rms) compliant to IS	5 Hz	5
Leica, Leica 4G, RTCM 2.x, RTCM 3.x, CMR, CMR+  Code differential (DGP5 / RTCM): < 0.4 m  Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mr  Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20  SBAS < 1.0 m, DGP5 typically < 0.4 m (rms) compliant to IS	•	
cost-processed accuracy4 (rms)  Code differential (DGPS / RTCM): < 0.4 m Static (phase): Horizontal 5 mm + 0.5 ppm, Vertical 10 mr Kinematic (phase): Horizontal 10 mm + 1 ppm, Vertical 20 SBAS < 1.0 m, DGPS typically < 0.4 m (rms) compliant to IS	•	
eal-time accuracy (SBAS or external source) <sup>4</sup> SBAS < 1.0 m, DGPS typically < 0.4 m (rms) compliant to IS	· · ·	
	17123-8 standard •	
Accessories <sup>5</sup>		
nti-glare screen protectors (2-pack), Stylus	•	
.00 – 240 V AC power supply for all regions	•	

- <sup>1</sup> Without battery 110 g
- <sup>2</sup> Onto plywood over concrete

• = Standard
• = Optional

- <sup>3</sup> 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.
- <sup>5</sup> For more information on accessories contact your local Leica authorized distribution partner.



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