Leica CS25 GNSS plus
The ultimate high-accuracy tablet
Datasheet

Zeno

Unique combination of high-accuracy GNSS and a rugged tablet computer

The CS25 GNSS plus packs full GNSS functionality into an ergonomic portable device – making it the industry's most powerful, GNSS handheld. The CS25 GNSS plus supports two setups, as a handheld with a compact antenna mounted on the CS25 GNSS plus or as a pole setup with an external GNSS Antenna (Leica AS10).

- As handheld: < 10 cm accuracy
- With external AS10: cm accuracy
- Access Reference Stations with integrated modem to achieve submeter to cm accuracy
- Huge data storage space of 128 GB on SSD and up to 2 TB on an optional SD card.

Excellent sunlight readability and ergonomics

The CS25 GNSS plus is equipped with a 7" colour transflective touchscreen that can be operated by finger or stylus. The display has been designed for optimal viewing, to be sunlight readable and backlit for darker conditions.

- Fully rugged (IP65), and large screen for comfortable viewing
- Hot swappable battery for continuous use
- Best mobility, as no poles are required to achieve dm–cm accuracy

Full Windows® 7 environment

CS25 GNSS plus includes the latest wireless communication technology, allowing GNSS-supported mapping applications with direct access to the office.

- Integrated high-speed communication standards (GSM/UMTS, Wi-Fi and Bluetooth®)
- Windows® 7 Ultimate OS allowing simple and familiar use

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Leica Geosystems

Technical Specifications

Leica CS25 GNSS plus

GNSS

Channels	120 channels L1 only, Optional: L1/L2
Satellite signals tracking	GPS: L1, L2, L2C; GLONASS: L1, L2 Beidou: B1; Galileo: E1
Integrated real-time	SBAS (WAAS, EGNOS, GAGAN)[1]
Output data protocols	NMEA-0183 (GGA, VTG, GLL, GSA, ZDA, GSV, RMC, GST, GRS) via Zeno Connect only
Real-time protocols	RTCM 2.x, RTCM 3.0, RTCM 3.1, Leica, CMR, CMR+
Update rate	1 Hz (1 sec), Optional: 5 Hz (0.2 sec)
Horizontal real-time accuracy[2] (SBAS or external source)	SBAS (L1 only): < 0.9 m DGNSS (L1 only, with internal): < 50 cm + 1 ppm RTK (with AS10, L1/L2): 1 cm + 1 ppm, RTK (with internal, L1/L2): < 10 cm + 1 ppm
Vertical real-time accuracy[2]	RTK (with AS10, L1/L2): 2 cm + 1 ppm, RTK (with internal, L1/L2): < 20 cm + 1 ppm
Post Processing accuracy static mode[2]	Horizontal: 3 mm + 0.5 ppm (rms) Vertical: 6 mm + 0.5 ppm (rms)
Time for initialisation[2]	Typically 10 sec

Technology

Processor & Memory	Intel Ultra Low Power Cedar Trail N2600 1.6GHz dual-core processor, 4 GB DDR3 RAM
Data Storage	128 GB SSD solid state hard drive – extensible with Secure Digital™ (microSD) Card and MultiMediaCard™ (MMC) compatible up to 2 TB
Operating System	Microsoft Windows® 7 Ultimate
Screen	7" widescreen 1024x600 resolution TFT LCD MaxView™ sunlight readable resistive touchscreen display
Integrated Camera	5 Megapixel camera with Autofocus + LED light
Standard Software	• uBlox Center software • Internet Explorer
I/O	• 1 x USB 2.0 port • 1 x 9-pin serial RS-232 port (fully waterproof, even when the latch is open) • 1 x LAN (Gigabit ethernet) • 1 x DC power port • 1 x SDXC card slot: capacity up to 2 TB • QN connector for Helix antenna or external GNSS antenna • Docking connector (contact pin type): 1 x 4 pin docking • Audio out and Microphone • Audio integrated (one speaker)

Communication

Integrated communication modules	Wireless LAN 802.11 b/g/n PAN: integrated Bluetooth® v.2.0 + EDR compliant WWAN Gobi™ 3000, supporting the following RF bands: • HSDPA/UMTS 800/850/900/1900/2100 MHz • Quad-band EDGE/GPRS/GSM – 850/900/1800/1900 MHz • Dual-band EV-DO – 800/1900 MHz 2 integrated 3.5G antenna (Main & Diversity)

Power Management

Batteries	Dual hot-swappable Li-Polymer battery pack, 5200 mAh each
Power	Input: 120 – 240 VAC, 50 – 60 Hz, 12 VDC output
Operating Time	6 h[3]

Physical Specifications

Size	144 mm (5.56") x 242 mm (9.5") x 40 mm (1.57")
Weight	1.4 kg (3 lbs) including all-day batteries and L1/L2 GNSS
Sand & Dust	IP65, MIL-STD-810G
Water	IP65, MIL-STD-810G
Altitude	4572 m (15.000 ft) at 5 °C (41 °F)
Operating temperature range	–33 °C to 63 °C (–27 °F to 145 °F), MIL-STD-810G, Method 501.4 Procedure II, MIL-STD 810G, Method 502.4, Procedure I, II, III
Storage temperature range	–40 °C to 70 °C (–40 °F to 158 °F) MIL-STD-810G, Method 501.4 Procedure II, MIL-STD 810G, Method 502.4, Procedure I, II, III
Humidity	MIL-STD-810G, Method 507.4, 90% RH temp cycle 0 °C/70 °C
Drop[4]	MIL-STD-810G 4ft drop, free to concrete 26 drops from 1.22 m (4 ft) MIL-STD-810G, Method 516.5, Procedure IV
Vibration	MIL-STD-810G, Method 514.5 Procedures I & II, General minimum integrity and the more rigorous loose cargo test

Accessories and Optional Features

Accessories	External battery charger, backpack kit, hard carry case, 12V vehicle charger, pole mount solution, anti-glare screen protectors, additional 5200 mAh battery
Optional Field and Office Software	Leica Zeno Field, Leica MobileMatriX, Leica Zeno Connect, Leica Zeno Office and Leica Zeno Office on ArcGIS
Optional GNSS Antenna	Leica AS10

[1] WAAS available in North America only, EGNOS available in Europe only
[2] May vary due to used antenna, atmospheric conditions, multipath, obstructions, signal geometry and number of tracked satellites.
[3] In continuous field operation mode, may vary with temperature, battery age, usage etc.
[4] Without mounted Helix antenna

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