Leica CS25 GNSS plus
The ultimate high-accuracy tablet Datasheet

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
The 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

- when it has to be right
**Technical Specifications**

**Leica CS25 GNSS**

### 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 power port
  - 1 x SDXC card slot: capacity up to 2 TB
  - 1 x QN connector for Helix antenna or external GNSS antenna
  - 1 x Docking connector (contact pin type): 1 x 4 pin docking
  - 1 x 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**
- **Storage temperature range**
- **Humidity**
  - MIL-STD-810G, Method 507.4, 90% RH temp cycle 0 °C/70 °C
- **Drops**
  - MIL-STD-810G, Method 507.4, MIL-STD-810G 4K 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

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\(^1\) 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