Leica Zeno 20
More than GPS

Outdoor experience
Zeno 20 is tough and built to last. Lightweight and compact, it fits in one hand, with the largest, best-in-class screen and a dust and water resistance IP67 rating. An out-of-box experience, Zeno 20 is ready to work when you are. Just unpack and go.

gamtec
Overcome GNSS limitations and extend productivity. gamtec merges two great tools, the Zeno 20 and the Disto™ S910, to create a contactless offset measuring solution, increasing safety dramatically in the field while maintaining highest accuracy.

More software
By choosing either Android or Windows Embedded Handheld operating systems, users can add their favourite mobile Apps, such as the Zeno Mobile, Zeno Field or any third party software to simplify workflows and maximise flexibility.
# Technical Specifications

---

## Leica Zeno 20

### GNSS

**Basic configuration**

GPS L1 only

**Upgrade options**

- GPS: L2, L2C
- GNOMASS: L1, L2
- BeiDou: B1
- Galileo: E1

**Channels**

120 channels

**Integrated real-time**

SBAS (WAAS, EGNOS, GAGAN, MSAS)

**Output data protocols**

NMEA-0183 (GGA, VTG, GLL, CSA, GSV, RMC, CST, GCO, LLQ) via Zeno Connect on WEH or position provided by Android Location Service via Zeno Connect on Android

**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**

| SBAS or external source | 1 cm + 1 ppm | 5 cm + 1 ppm with L1/L2 handheld | <60cm L1 handheld | <0.9 m with SBAS L1 handheld |

**Vertical real-time accuracy**

RTK (with AS10, L1/L2): 2 cm + 1 ppm, RTK (with internal, L1/L2): <10 cm + 1 ppm

### Accuracy and Reliability

- Post processing accuracy static mode:
  - Horizontal: 3 mm ± 0.5 ppm (rms)
  - Vertical: 6 mm ± 0.5 ppm (rms)

- Time to first fix:
  - Typically 40 sec

### Power Management

- **Batteries**
  - Hot-swappable Li-Ion battery with 7800 mAh and one small internal battery which allows the hot-swap

- **Power management**
  - Input: 100 - 240 V AC, 50 - 60 Hz; output: 5.0 V DC, 1.8 A
  - Charge time: <6h

### Communication

- **Integrated communication modules**
  - Wireless LAN 802.11 b/g/n
  - Bluetooth®: Class 2 (10m), v3.0 in Android OS and v2.0 in Windows Mobile OS
  - WMN 3.8 G C (Zero 20 UMTS) or CDMA (Zero 20 CDMA), supporting the following RF bands:
    - GSM: HSDPA/UMTS 800/850/900/1900/2100 MHz
    - GSM: Quad-band EDGE/GPRS/GSM – 850/900/1800/1900 MHz
    - CDMA: Dual-band EV-DO Rev. A – 800/1900 MHz – 800/1900 MHz

- **Power Management**
  - Batteries: Hot-swappable Li-Ion battery with 7800 mAh and one small internal battery which allows the hot-swap
  - Input: 100 - 240 V AC, 50 - 60 Hz; output: 5.0 V DC, 1.8 A
  - Charge time: <6h

- **Operating time**
  - Autonomous GNSS usage: 8 hours
  - Real time DGNSS usage (via integrated modem): 7 hours
  - Bluetooth® usage: 20 hours
  - Standby: up to 50 days

### Physical Specifications

- **Size**
  - 99 mm (3.9") x 259 mm (10.1") x 40 mm (2.0")

- **Weight**
  - <880 g including battery

- **Water**
  - IPx6 Dust, IPx7 Survives dip in 1m depth for 30min IEC-60529

- **Altimeter**
  - 15,000 ft (4,572 m) at 73 °F (23 °C) to 40,000 ft (12,192 m) at -22 °F (-30 °C)
  - ML-STD-810G, Method 500.5, Procedure 1, II & III

- **Humidity**
  - 90% relative at -30 °C to +60 °C; ML-STD-810G, Method 507.5 II

- **Drop**
  - ML-STD-810G 4ft drop, free to concrete
  - 26 drops from 1.22 m (4 ft)

- **Vibration**
  - NEL-STD-810G, Method M4.5 Procedures I & II; Category 4; 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 Zeno Mobile, Leica Zeno Connect, Leica Zeno Office and Leica Zeno Office on ArcGIS

**Other trademarks and trade names are those of their respective owners.**

---

© 2015 Leica Geosystems AG - all rights reserved.