# **Leica Zeno 10 & Zeno 15**GNSS/GIS Handhelds Datasheet







IP67

# The most rugged and versatile GNSS/GIS Handhelds in the market

High performance GNSS/GIS handhelds give you all the power you need. The perfect field tools for maintaining your GIS whether you are working for a utility company, local government, federal agency, or for anyone managing or mapping infrastructure or assets. Leica Zeno GIS series delivers the quality and reliability you can trust.

- IP67 and -30 to 60° C operation
- Combine GIS and Survey equipment
- Combine with Leica Zeno SmartAntennas to achieve cm accuracy



### High-Performance sub-meter GNSS/GIS Handhelds

Delivering consistent sub-meter accuracy both real-time and post-processed. Leica Zeno 10 and Leica Zeno 15 handhelds combine a high-performance sub-meter GNSS sensor with a rugged handheld for anyone who needs accurate and reliable data even in the most demanding environments.

- DGPS < 0.3 m
- SBAS < 1.2 m
- Post-processed sub-meter decimeter



# Packed with power for outstanding performance

The optional docking station ensures quick, direct and easy access to the data you have measured in the field. Just plug in and field data is downloaded, post-processed and updated in Zeno Office, with just one simple click. Together with full support of all survey equipment, data maintenance has never been so easy.

- Convenient wireless or wired data download & upload
- Optional fully integrated wireless technology (GSM/UMTS 3.5G and WLAN)





# **Technical Specifications**

Ergonomic and cable-free GNSS Handheld		Zeno 10	Zeno
Operating System	Windows CE 6.0	•	•
Display	8.9 cm (3.5 in) 640 x 480 pixel (VGA) color TFT, touch screen, sunlight-readable, LED backlight	portrait	landso
Camera	Integrated 2 MPixel fixed focus camera	•	•
/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 or Lemo module: Lemo (USB and serial), USB A Host, 7-pin connector, Power	•	•
Interface	Touch screen, Ergonomic cable-free handheld with fully illuminated keyboard, virtual keyboard	Numeric 26 keys	QWE 65 kg
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, Bluetooth® audio headset support	•	•
LEDs	Battery and Bluetooth® status LED	•	•
Wireless connectivity	Bluetooth® 2.0 Class 2	•	•
	Wireless LAN 802.11b/g Integrated GSM/UMTS 3.5G module with fully integrated internal antenna	0	0
Software			
Application Software	Zeno Field	0	0
Included Software	Internet Explorer Mobile, File Explorer, Word Mobile, Microsoft Windows Media™ Player,	_	_
	Camera Software, Online Help	•	•
Power Management	CED212 /7 (V/ 2000 mAh li lag mahawasahla)	•	
Removable Battery	GEB212 (7.4 V / 2600 mAh Li-lon rechargeable)	_	•
Battery Charging Time	2 hours	•	•
Power	Nominal 12 V DC, Range 10.5 - 28 V DC	•	•
Operating Time	8 - 9 hours (depending on use of embedded device)	•	•
Dimensions and Weight		1	
Size	Zeno 10: 278 mm / 102 mm / 45 mm (10.94 in / 4.01 in / 1.77 in) Zeno 15: 323 mm / 125 mm / 45 mm (12.72 in / 4.92 in / 1.77 in)	•	•
Weight <sup>1</sup>		0.74 kg (1.63 lbs)	0.90 (1.98
Environmental specifications			
Operating / Storage temperature range	Operation: -30 to 60° C (-22 to 140° F), Storage: -40 to 80° C (-40 to 176° F)	•	•
Dust and Water / Humidity	IP67 (IEC 60529) / 100% non-condensing (MIL-STD-810F, Method 507.4-1)	•	•
Drop / Vibration	1.2 m (4 ft) <sup>2</sup> MIL-STD-810F, Method 514.5 – Cat24	•	•
GNSS – integrated high-performance GNSS (GPS, Glonass and SBAS	s) receiver and L1 Antenna		
Channels	14	•	•
GNSS	GPS GLONASS	•	•
Integrated Real-Time	SBAS (WAAS, EGNOS, MSAS, GAGAN) <sup>3</sup>	•	•
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 <sup>4</sup>	•	•
Update Rate	5 Hz	•	•
		•	•
Time to first fix (typical)	Frozen Start 120 sec, Hot Start 35 sec	_	-
Output Data Protocols	NMEA-0183 (GGA, VTG, GLL, GSA, ZDA, GSV, RMC, GST, GRS)	•	•
Real-Time Protocols	RTCM 2.x, RTCM 3.0, CMR, CMR+	•	•
Post-Processed Accuracy <sup>4</sup>	Baseline mode L1 Phase: 10 mm + 2 ppm RMS, Baseline mode L1 Code: < 0.4 m	•	•
Horizontal Real-Time Accuracy (SBAS or external source) <sup>4</sup> Accessories	SBAS <1.2 m, DGPS <0.3 m	•	•
		•	•
Anti-glare screen protectors (2-pack), Stylus			•
		•	
Documentation CD		•	
Documentation CD 100 – 240 V AC Power supply for all regions		_	
Documentation CD 100 – 240 V AC Power supply for all regions Pouch, Hand-strap, Hard carry case		•	0
Documentation CD 100 – 240 V AC Power supply for all regions Pouch, Hand-strap, Hard carry case External battery charger, Vehicle power adaptor		0	0
Anti-glare screen protectors (2-pack), Stylus  Documentation CD  100 – 240 V AC Power supply for all regions  Pouch, Hand-strap, Hard carry case  External battery charger, Vehicle power adaptor  Docking station for convenient data transfer		0 0	0
Documentation CD 100 – 240 V AC Power supply for all regions Pouch, Hand-strap, Hard carry case External battery charger, Vehicle power adaptor		0	c

<sup>2</sup> onto plywood over concrete
<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
<sup>4</sup> Position accuracy depends on available sat, proximity to base station, multipath effects, antenna type, etc.

O = Optional





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