






Leica GIS Asset Collection and Management

Your Complete Enterprise Solution



Leica GIS Asset Collection & Management

Field Controllers with Integrated GNSS

	Zeno 5	Zeno 20	CS25 Plus	CS25 LRBT Plus	CS25 GNSS Plus
					
DGNSS Accuracy: Post-Processed	<1-3m	1-50cm	No	No	1-50cm
DGNSS Accuracy: Real-time	SBAS: 1-3m	1-100cm	SBAS: 2-5m	SBAS: 2-5m	1-100cm
Integrated SBAS	Yes	Yes	Yes	Yes	Yes
GLONASS Capable	No	Yes	No	No	Yes
BeiDou & Galileo Capable	No	Yes	No	No	Yes
Processor	Industrial TI AM3715 Sitara (ARM Corext A8) @ 800MHz	TI OMAP 4470 Dual Core 1.5GHz	Intel Ultra Low Power Cedar Trail N2600 1.6 GHz dual core processor	Intel Ultra Low Power Cedar Trail N2600 1.6 GHz dual core processor	Intel Ultra Low Power Cedar Trail N2600 1.6 GHz dual core processor
Memory	256 MB SDRAM	1 GB RAM	4 GB DDR3 RAM	4 GB DDR3 RAM	4 GB DDR3 RAM
Operating System	Microsoft Windows Embedded Handheld 6.5.3	Windows Embedded Handheld 6.5.3 or Android 4.2.2 (Jelly Bean)	Windows 7 Ultimate	Windows 7 Ultimate	Windows 7 Ultimate
Screen	3.7" VGA (480 x 640) portrait mode, color touch screen	4.7" Asahi Dragontrail	7" widescreen (1024 x 600), color touch screen	7" widescreen (1024 x 600), color touch screen	7" widescreen (1024 x 600), color touch screen
Data Storage	2 GB Flash	1 GB Flash	128 GB SSD	128 GB SSD	128 GB SSD
Data Storage Expansion Slot	MicroSD memory card	Yes, microSD card up to 32GB	Yes, SD, SDXC, MMC up to 32GB to 2TB	Yes, SD, SDXC, MMC up to 32GB to 2TB	Yes, SD, SDXC, MMC up to 32GB to 2TB
Keyboard	QWERTY keypad & virtual keyboard	Keypad with 3 operating system hard keys, 3 programmable buttons, one navigation wheel, a GNSS button and a power button	On screen QWERTY soft keyboard	On screen QWERTY soft keyboard	On screen QWERTY soft keyboard
I/O	USB and DC Input (via SnapOn module), docking connector (contact pin type)	1 x USB 2.0 (fully waterproof), 1 x micro USB Client (fully waterproof), 1 x External SMB Antenna Connector, Integrated Audio & Microphone	2 x USB 2.0, 1 x 9-pin serial RS232 port, 1 x LAN, 1 x DC power port, 1 x 4-pin docking port	1 x USB 2.0, 1 x 9-pin serial RS232 port, 1 x LAN, 1 x DC power port, 1 x 4-pin docking port	1 x USB 2.0, 1 x 9-pin serial RS232 port, 1 x LAN, 1 x DC power port, 1 x 4-pin docking port
Bluetooth	Yes	Yes, Class 2, v3.0 (Android) & v2.0 (Windows)	Yes	Yes, long range, up to 350 meters	Yes
WiFi	Yes	Yes, 802.11 b/g/n	Yes	Yes	Yes
Cellular Data Modem	Yes, GSM, supports voice & data	Yes, GSM or CDMA	Yes, Gobi 3000 (GSM)	Yes, Gobi 3000 (GSM)	Yes, Gobi 3000 (GSM)
Integrated Camera	Yes (3.2 MP Color with Auto Focus and Dual LED Flash)	Yes, 8 MP Autofocus & LED Flash	Yes, 5MP + LED Flash	Yes, 5MP + LED Flash	Yes, 5MP + LED Flash
Battery Operating Time	10 hours, hot swappable	8 hours, Hot-Swappable	8 hours, hot swappable	8 hours, hot swappable	6 hours, hot swappable
Size	6.2" x 3.1" x 1.5"	10.1" x 3.9" x 2.0"	5.56" x 9.5" x 1.57"	5.56" x 9.5" x 1.57"	5.56" x 9.5" x 1.57"
Weight	0.82 lbs	1.93 lbs	2.9 lbs	2.9 lbs	2.9 lbs
Sand, Dust & Water	IP54, IEC 529	IP67	IP65 (MIL-STD-801G)	IP65 (MIL-STD-801G)	IP65 (MIL-STD-801G)
Operating Temperature Range	14°F to 122°F	-22°F to 140°F	-27°F to 145°F	-27°F to 145°F	-27°F to 145°F
Storage Temperature Range	-4°F to 140°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F	-40°F to 158°F
Humidity	5% to 95% RH non-condensing	90% relative humidity with temperatures between 22 °F and 144 °F, MIL-STD-810G, Method 507.5, Procedure II.	90% RH (MIL-STD-801G, Method 507.4)	90% RH (MIL-STD-801G, Method 507.4)	90% RH (MIL-STD-801G, Method 507.4)
Drop	1.5m - 26 drops on each edge, corner and face to polished concrete	1.22m	1.22m (MIL-STD-810G), 26 drops from 1.22m (MIL-STD-801G, Method 516.5, Procedure IV)	1.22m (MIL-STD-810G), 26 drops from 1.22m (MIL-STD-801G, Method 516.5, Procedure IV)	1.22m (MIL-STD-810G), 26 drops from 1.22m (MIL-STD-801G, Method 516.5, Procedure IV)



Zeno Mobile Software

- Intuitive and easy to use interface
- Optimized for Android OS
- Simplified feature collection & attribute editing routines
- Open Street Maps & Hexagon Imagery Program basemaps
- Multi-feature Collect, Stake-out and gamtec integration (Professional version only)
- Ideal software for entry level collection to enterprise operations



Leica Zeno Office

- Stand-alone installation or extension for Esri ArcGIS for Desktop
- Optimal data management and calculation of GNSS measurements
- Automated workflows for office to field to office operations (EasyOut/EasyIn)
- Transfer of detailed GNSS quality metadata maintained with the Geodatabase
- Raster and Vector data support with a multitude of formats; e.g. Shapefile, DXF, DGN, DWG
- Post-processing support for GNSS raw data to increase accuracy



Leica Zeno Connect

- Transfer GNSS positioning to 3rd party application
- Configuration, status and management of the Zeno GNSS receivers
- Raw data collection & storage
- Integrated with datum transformations and geoid model support
- Operated in parallel to the 3rd party application or via SDK integration
- Supports and works with all Leica Zeno products



Leica Zeno Field

- Based on Esri ArcPad 10
- Manage, capture, edit and view geographical information in the field
- Configure and manage GNSS performance
- GNSS high accuracy raw data capture for post-processing
- Maintain geodatabase integrated with a simple automated workflow
- Supports all Zeno Hardware
- Connectivity for external devices; e.g. laser rangefinder, cable detectors, etc.



Gamtec

- Integration with Zeno Mobile & Zeno Field utilizing the Leica Disto S910
- Wi-Fi communication protocol between the Zeno 20 & Disto S910
- High-accuracy offsets for inaccessible/unreachable features or when safety is a concern
- Rapid feature collection
- Easily switch from GNSS measurements to gamtec feature collection
- Tripod (TRI-100 tripod and FTA360 Adapter) or 2 meter pole configuration



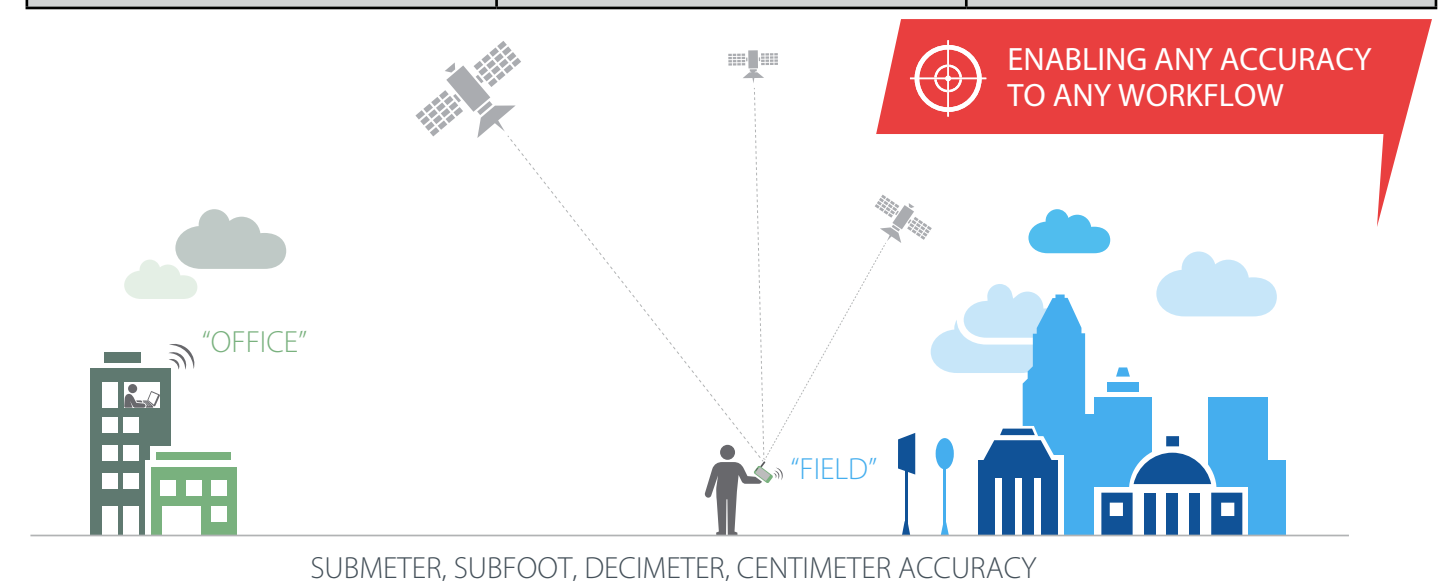
Leica GIS Asset Collection & Management Field Software

Field Software	Zeno Mobile	Zeno Field	Zeno Connect
Data & Asset Collection	Yes	Yes	No
Data & Asset Management	Yes	Yes	No
Data & Asset Maintenance	Yes	Yes	No
Quick Feature Capture	Yes	Yes	No
Navigation	Yes, Professional only	Yes	No
Geoid Model Support	Yes	Yes	Yes
Predefined and Custom Transformations	Yes	Yes	Yes
NMEA Output to 3 rd Party Software	No	No	Yes
SBAS Corrected Data Collection	Yes	Yes	Yes
DGNSS Corrected Data Collection	Yes	Yes	Yes
Collect Raw Data for Post-Processing	Yes	Yes, excluding CS25 plus and CS25 LRBT plus	Yes, excluding CS25 plus and CS25 LRBT plus
RTK Data Collection	Yes, Network RTK or UHF Radio	Yes, Network RTK or UHF Radio	Yes
Customization	No	Yes, Esri ArcStudio	No
Data Formats	Leica/Esri AXF preferred, shapefiles & ASCII	Leica/Esri AXF preferred and shapeles	None
Georeferenced Image Support	Yes	Yes	No
Add Data from ArcGIS Online	Yes	Yes	No
Open Street Map Support	Yes	No	No
HxIP (Hexagon Imagery Program) Support	Yes	No	No
SmartAntenna Support	Yes, GG03 L1 only or GG03 L1/L2	Yes, GG03 L1 only or GG03 L1/L2	Yes, GG03 L1 only or GG03 L1/L2
Real-time GNSS Settings & Conguration Wizard	Yes	Yes	Yes
GNSS Status Bar	Yes	Yes	Yes
Peripheral Support	Yes, gamtec (Disto S910)	Cameras, Laser Distance Meter/ Rangefinders & Cable Locators	No
Supported Devices	Zeno 20	Zeno 5, CS10/15, Zeno 10/15, Zeno 20, CS25 Plus Series	Zeno 5, CS10/15, Zeno 10/15, Zeno 20, CS25 Plus Series





Leica GIS Asset Collection & Management Office Software

Office Software	Zeno Office	Zeno Office on ArcGIS
Seamlessly integrate GIS, GNSS and survey data together with feature quality information	Yes	Yes
Import, view, edit and post-process GNSS data	Yes	Yes
Easy feature position verication and update to most accurate location	Yes	Yes
Seamless Import/Export of Leica Surveying Format and Connect to Leica Surveying Equipment	Yes	Yes
Extend and customize with ArcObjects	Yes	Yes
Supports Esri File and Personal Geodatabase	Yes	Yes
Supports Esri multi-user geodatabase (SQL Server and SQL Express)	Yes	Yes
Supports Shapefile, AutoCAD DWG, DXF, Microstation DGN & AXF Files for ArcPad	Yes	Yes
EasyOut/In process for productive field to office workflow	Yes	Yes
Work with GNSS data directly in the geodatabase	Yes	Yes
Achieve from submeter to centimeter accuracy after post-processing	Yes	Yes



Leica GIS Asset Collection & Management

SmartAntenna

SmartAntenna	GG03 L1 Only	GG03 L1/L2
		
DGNSS Accuracy: Post-Processed	1-50cm	1cm + 2ppm
DGNSS Accuracy: Real-time	40-90cm	1-90cm
Integrated SBAS	Yes	Yes
GLONASS Capable	Yes	Yes
BeiDou & Galileo Capable	Yes	Yes
Update Rate	1 Hz, Optional: 5Hz	1 Hz, Optional: 5Hz
Real-time Protocols	RTCM 2.x, RTCM 3.0, RTCM 3.1, Leica, CMR, CMR+	RTCM 2.x, RTCM 3.0, RTCM 3.1, Leica, CMR, CMR+
I/O	8-pin Lemo combined USB/power port	8-pin Lemo combined USB/power port
Bluetooth	Yes	Yes
Removable Battery	Yes	Yes
Battery Operating Time	10 hours (GNSS only), 8 hours (RTK)	10 hours (GNSS only), 8 hours (RTK)
Weight	1.76 lbs	1.76 lbs
Sand, Dust & Water	IP68: dust and water-resistant for all conditions Temporary submersion into water (max. depth: 1 m) Protected against blowing rain and dust	IP68: dust and water-resistant for all conditions Temporary submersion into water (max. depth: 1 m) Protected against blowing rain and dust
Operating Temperature Range	-40°F to 149°F	-40°F to 149°F
Storage Temperature Range	-40°F to 176°F	-40°F to 176°F
Humidity	100% non-condensing	100% non-condensing
Drop	Withstands topple over from a 2m survey pole onto hard surface, withstands 1m drop onto hard surface	Withstands topple over from a 2m survey pole onto hard surface, withstands 1m drop onto hard surface
Compatible Field Controllers	Zeno 5, CS10/15, Zeno 10/15, Zeno 20, CS25 plus series	Zeno 5, CS10/15, Zeno 10/15, Zeno 20, & CS25 plus series

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- when it has to be **right**

Leica
Geosystems