GNSS Receiver

The Zenith16 GNSS receiver is the flexible field solution that guarantees you dependable results in any working environment. In combination with GeoMax field controllers and the X-PAD software, the receiver unfolds its full potential. In offering the Zenith16 with and without a SATEL radio onboard, GeoMax provides you the flexibility to choose the solution that perfectly fits your needs.

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WANT TO UPGRADE YOUR RECEIVER?

Upgrade your Zenith16 receiver and profit from all the benefits that the complete GeoMax product portfolio has to offer. The Zenith16 seamlessly integrates with all GeoMax field controllers. Starting from a simple Bluetooth® connection via the QR-code, to the extended functionality of the SIM card within the field controller which allows you to work with the Global System for Mobile (GSM) even though no such module is built into the Zenith16. This enables you to connect to Networked Transport of RTCM via Internet Protocol (NTRIP) networks if available. A stable Bluetooth connection is guaranteed by our harmonious / synchronised / harmonised approach / holistic approach / due to the harmonisation in the development process of GeoMax products. Last but not least, X-PAD Ultimate field software is the glue that holds everything together and makes the solution work when you do.

RENOWNED PARTNERS

Experience increased productivity and reduced failure rates thanks to the power of Hexagon's cutting-edge technology and the partnership with high-quality brands like SATEL, NovAtel and Lemo.

OPEN & FLEXIBLE CONFIGURATION

The Zenith Manager, a stand-alone application available for Windows® and Android™ operating systems, enables you to configure your receiver without using the field controller.

X-PAD

Stable Bluetooth connection

SIM card on the tablet

Connecting QR-code

X-PAD on Android

IP68

SEAMLESSLY INTEGRATED INTO YOUR WORKFLOW

Whether in the field or in the office, GeoMax X-PAD Ultimate software streamlines the workflow for maximum efficiency. GeoMax X-PAD field software is available in two tailored versions: one for surveyors and one for construction professionals, supporting both Windows and Android operating systems. Working closely with key-users around the world, X-PAD is continuously updated to maintain a perfect combination of clear structure, straightforward workflows and high functionality.

The GeoMax software offering is enhanced by X-PAD Fusion, a desktop software integrating geospatial data from TPS, GNSS, Scanners and other sensors in a single environment. Differentto other software solutions in the market X-PAD Fusion manages measurements, coordinates, drawings, point clouds and other types of data in ONE platform in a simple and intuitive way.

TAILORED TO YOUR NEEDS

Listening to our customers and understanding their needs have and continue to be a priority for GeoMax. Our aim is to empower our customers to choose what features they really need to get the job done.

This is why the Zenith16 receiver is available in two different versions, with and without a SATEL radio onboard.

▪ Speed   ▪ Flexibility   ▪ Ease   ▪ Upgraded functionality   ▪ Efficiency

Receiver specifications

Q-Lock Pro™ functionality	Lowest noise and advanced mutipath mitigation for highest reliability
Reliabiliy	99.95%
Measurement Engine	NovAtel OEM7, 181 channels, dual-frequency / multi-constellation
GPS tracking	L1, L2, L2C
GLONASS tracking	L1, L2, L2C
BeiDou tracking	B1, B2 (opt)
Galileo tracking	E1, E5b (opt)
QZSS tracking	L1, L2C (opt)
Positioning rate	5 Hz
SBAS	EGNOS, WAAS, MSAS, GAGAN

Receiver accuracy (rms)*

RTK	Hz	10 mm + 1 ppm
	V	20 mm + 1 ppm
Network RTK	Hz	10 mm + 0.5 ppm
	V	20 mm + 0.5 ppm
Static	Hz	5 mm + 0.5 ppm
	V	10 mm + 0.5 ppm
Static - long	Hz	3 mm + 0.1 ppm
	V	3.5 mm + 0.4 ppm

Interfaces

Keyboard	On/off and function key
LED status indicators	Position, battery, Bluetooth®, RTK receive, RTK transmit, data storage
LED mode indicators	Rover, base, static
Data recording	Removable microSD card

Communication

UHF radio module	SATEL, 500mW, 1000 mW transceiver, 403 – 473 MHz; (opt)
Bluetooth®	Device class II QR-iConnect functionality
TNC connector	High sensitivity, UHF antenna
Communication port	USB, serial & power

Physical specifications

Dimensions	Height 95 mm, ø 198 mm
Weight	1.09 - 1.13 kg **
Operating temp.	−40°C to 65°C
Environmental protection	IP68 / IP66 / MIL
Humidity	100%, condensing
Vibration	Mechanical stress resistant according to ISO 9022-36-05
Shock	Withstands 2 m drop onto hard surface

Power supply

Internal battery	Removable, Li-Ion 2.6 Ah / 7.4 V
Operating time	9 h in static / 6 h in rover mode
External power	10.5 V to 28 V, LEMO® plug

* Measurement precision, accuracy, reliability and time for initialisation are dependent upon various factors including number of satellites, observation time, atmospheric conditions, multipath etc. Figures quoted assume normal to favourable conditions. A full BeiDou and Galileo constellation will further increase measurement performance and accuracy.
** Depending on device configuration; without battery
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Android is a trademark of Google LLC.

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