GEOMAX

Zenith55

GNSS Receiver

Smart choice for growing businesses

- Professional-grade performance with practical value in mind.
- Multi-frequency with over 600 channels for enhanced tracking and performance.
- Robust design (IP68) to safeguard your investment.

Productive workflows

- Calibration-free tilt compensation for fast data collection without levelling the pole.
- Multi-constellation support for continuous, reliable data.
- Comprehensive GeoMax Support at your fingertips to maximize efficiency.

Complete solution, optimal performance

- Fully integrated into the GeoMax ecosystem.
- Streamlined connection with X-PAD field software, robotic total stations, and field controllers.
- Complimentary field software updates to maintain peak funcionality.

Scan to learn more about the
Zenith55

geomax-positioning.com

Zenith55

Professional-grade performance, practical value

The Zenith55 is a professional-grade GNSS smart antenna that combines advanced features with practical value, all backed by exemplary GeoMax support. It offers efficient workflows that generate a strong return on investment for construction and surveying professionals.

Integrated into the GeoMax ecosystem, the Zenith55 works seamlessly with GeoMax robotic total stations, field controllers and the X-PAD field software. This makes it more than just a GNSS receiver – it's a comprehensive solution that ensures dependable precision and boosts productivity.

VARIANTS	4G LTE	UHF	TILT COMPENSATION
GeoMax Zenith55 LTE-UHF-IMU	■	■	■

RECEIVER SPECIFICATIONS

Measurement Engine	600+ channels, multi-frequency, multi-constellation
GPS tracking	L1 C/A, L1P, L1C, L2C, L2P, L5
GLONASS tracking	L1 C/A, L2 C/A, L3**
BeiDou tracking	B1I, B1C, B2I, B2a, B2b, B3I, ACEBOC
Galileo tracking	E1, E5a, E5b, E6, AltBOC
QZSS tracking	L1 C/A, L1C, L2C, L5, L6
NavIC	L5
SBAS (EGNOS, WAAS, MSAS, GAGAN)	L1, L5
Positioning rate	10 Hz
Time for Initialisation	Typically 6s

QUALITY MODE

Tilt Compensation	Calibration-free, Resistant to magnetic interferences

COMMUNICATION

4G LTE module	QUECTEL EG25-G LTE FDD, LTE TDD, UMTS, GSM
RTK data protocols	RTCM 2.1, 2.3, 3.0, 3.1, 3.2, 3.3, 3.4, CMR, CMR+
NMEA Output	NMEA v3.1, NMEA v4.1
UHF radio module	TRM101, 500 mW, 1000 mW transceiver, 410–470 MHz
Bluetooth®	2.1 +EDR, V5.0 QR-iConnect functionality
WLAN	802.11 b/g/n Hotspot / client mode
TNC connector	UHF antenna
Communication port	USB, serial & power

RECEIVER ACCURACY & PERFORMANCE *

RTK	Hz: 10 mm + 1 ppm (rms) V: 20 mm + 1 ppm (rms)
Network RTK	Hz: 10 mm + 0.5 ppm (rms) V: 20 mm + 0.5 ppm (rms)
Static	Hz: 5 mm + 0.5 ppm (rms) V: 8 mm + 0.5 ppm (rms)
Tilt compensated real-time kinematic	Additional Hz uncertainty 2 cm up to 30° tilt

INTERFACES

Keyboard	On/Off button
LED status indicators	Position, RTK, Power, Bluetooth®
Data recording	Dual; microSD card and 8 GB internal memory
LTE/TCP/IP	Removable SIM card

POWER SUPPLY

Two internal batteries	Hot-swappable, Li-Ion 3.4 Ah / 7.2 V
Operating time	12.5 h in static / 11 h in rover mode
External power	9 V to 28 V, LEMO® plug

PHYSICAL SPECIFICATIONS

Dimensions	Height 75 mm, ø 166.8 mm
Weight	1.14 kg without batteries
Operating temp.	−40°C to 65°C
Environmental protection	IP68 (IEC 60529) Withstands powerful jets and temp. immersion under water MIL-STD-810G 1 506.6 & 1 512.6 Fully dust tight MIL-STD-810G 1 510.6
Humidity	MIL-STD-810H 1 507.6
Vibration	Mechanical stress resistant according to ISO 9022-36-05
Shock	Withstands 2 m drop onto hard surface

* Measurement accuracy and reliability are dependent on various factors including satellite geometry, obstructions, observation time, ionospheric conditions, multipath, etc.

** Glonass L3 will be provided through future firmware upgrade.

Figures quoted assume normal to favourable conditions. GeoMax reserves the right to change, without notice, product offerings or specifications.