



# About us

At GeoMax, we provide a comprehensive portfolio of integrated solutions by developing, manufacturing and distributing quality construction and surveying instruments and software.

Our comprehensive product portfolio includes easy-to-use, yet highly productive manual and robotic total stations, GNSS receivers, laser scanners, 3D measuring systems, software, lasers, levels, machine guidance and cable location systems, levels and accessories.

Our products are known for robustness, ease of use and outstanding price-to-performance ratio. From our base in Europe, our technology is supported by a broad sales and service network covering all continents and more than 100 branches.

GeoMax is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications.





# GeoMax portfolio

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# GEOMAX TOTAL STATIONS

Boost your daily performance with these easy-to-use, yet highly productive total stations for a wide range of applications such as surveying, engineering and construction.







acc<sup>ESS</sup> 10

acc<sup>ESS</sup> 10

GEOMAX

14:14 Circular 1 MM  
MAIN MENU  
1 Apps 2 Data 3 Settings  
4 Survey 5 Transfer 6 Tools

GEOMAX

Trk  
HT: 0.000m  
RL: Stat  
SideShot  
Next ID  
475  
-No Line-  
-No Desc-

TP ABC DEF GH  
F7 7 8 9  
F8 4 5 6  
F9 1 2 3  
0  
ESC  
FNC  
F10 F11 F12  
ESC  
FNC

F1 F2 F3 F4

F1 F2 F3 F4 F5 F6

# GeoMax Zoom90 Series

The ultimate one-man system



## STReAM360: FULLY ROBOTIC

**Scout:** Scans the entire working area within seconds to quickly find the target.

**TRack:** Continuously tracks targets. Once locked onto, the instrument remains accurately aimed at the moving target.

**AiM:** Aims accurately at any prism, without needing to look through the telescope. Measurements are performed automatically with consistently high and repeatable dependability.

## X-MOTION™ HYBRID DRIVES

Zoom90 incorporates highly innovative X-motion hybrid drives, promoting automation performance compared to conventional drives.

It will follow your target at 90 km/h at 100 m distance.

## NavLight™

Fitted as standard in the telescope, the NavLight is an efficient alignment aid, helping to speed up work while setting out.

Its flashing red and yellow lights will guide you quickly and exactly to the line of sight.

## accXess™ EDM TECHNOLOGY

GeoMax's accXess EDM Technology provides leading reflectorless measurements up to 1000 m.

The extra small laser footprint and the sophisticated signal-processing technology, ensure you accuracy - regardless of the distance or conditions.

## Technical data

Accuracy	5", 2", 1"
Prism (range, accuracy)	3500 m, 1 mm + 1.5 ppm
Prism, long-range (range, accuracy)	10000 m, 5 mm + 2 ppm
Non-prism (range, accuracy)	1000 m / 500 m, 2 mm + 2 ppm*
Scout range	300 m at round prism
TRack range	800 m at round prism
AiM range	1000 m at round prism

\* > 500 m: 4 mm + 2 ppm







### OPEN CONNECTIVITY

Combine your preferred software and data logger to perform remote control tasks with increased productivity. Zoom90 uses the Windows CE operating system, which enables a variety of powerful field software to be run, offering you freedom to choose software that best suits your needs. Full VGA colour touch display will also provide you with superior performance and full graphic capability.

	Scout	TTrack	AiM	accXess 10	accXess S
Robotic (R)	✓	✓	✓	✓	✓
Servo (S)		✓	✓	✓	✓



# GeoMax X-Pole

- when TPS meets GNSS



## WORKING SIMULTANEOUSLY WITH TPS AND GNSS

By combining the advantages of both systems, the new X-Pole solution significantly improves performance and flexibility on the jobsite.

The seamless integration of X-Pole into the X-PAD field software allows a toggle between both measurement

modes. Simply decide with the press of one button if you want to change from TPS to GNSS mode, such as when some points cannot be measured with TPS due to limited prism visibility. Once those points are measured, switch back to TPS mode.

This enhances the efficiency of the system since it eliminates the need for cumbersome and time consuming station setups. Zoom90's Track360 functionality allows following a moving prism. In case of loss of lock, the X-Pole solution immediately finds the pole position by obtaining the coordinates from the GNSS receiver mounted on top of the prism.





## KEY FEATURES

- Simultaneous TPS & GNSS measurements during setup
- Change from TPS to GNSS measurement mode at the press of a button
- TPS & GNSS measurements stored in one common database
- Modular solution to be combined with any GeoMax Zenith15/25 Pro /35 Pro GNSS receiver
- Flexible upgrade path even for robotic TPS & GNSS systems



# GeoMax Zoom35 Pro Series

Highest performance on every level



## SUPERIOR accXess10 EDM

With the proven accXess10 technology, the Zoom35 Pro features an intelligent distance measurement engine designed for outstanding speed and highest accuracy even on extremely long ranges. This means a wider operational coverage and significantly less time lost with switching set ups.



## EASY CONNECTIVITY

The GeoMax Zoom35 Pro manual total station includes an environmentally protected USB port, internal Bluetooth® and a cable connection port that allow for fast, simple and dependable data transfer between the instrument and your PC or handheld controller using easy to connect Plug and Play technology.



## COLOUR TOUCH SCREEN

The extra large 3.5" colour touch screen with Q-VGA display provides for brilliant readability even in strong sunlight. Together with an extra-large high-resolution display, the easy-to-use graphical interface makes regular tasks such as stake-outs easier and more productive than ever before.

## Technical data

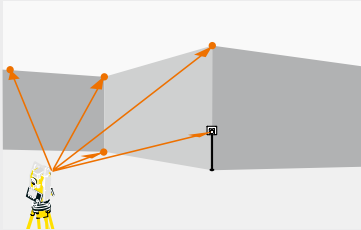
Hz, V Standard deviation (ISO 17123-3)	1", 2", 3", 5"
Compensator system	Quadruple-axis compensation
Measuring range with prism	10,000 m
Accuracy on reflector (Fine/Tracking)	2 mm + 2 ppm / 3 mm + 2 ppm
Reflectorless range accXess10	>1,000 m
Accuracy reflectorless	2 mm + 2 ppm (>500 m 4 mm + 2 ppm)
Communication	USB, Bluetooth, USB Host, RS232

## GeoMax Zoom35 Pro accXess10

Distance measurement to reflector and 1,000 m reflectorless measurement







## APPLICATIONS

Every Zoom35 Pro Total Station comes with a complete range of powerful applications:

- Survey and coding
- Set-up with resection
- Set out
- Area 3D and volume
- Remote elevation
- Construction
- Reference line
- Reference arc
- Grid setout
- Column offset
- CoGo routines
- Missing line measurement
- Two prism offsets
- Road 2D
- Road 3D



# GeoMax Zoom30 Pro Series

A total station for all those demanding high performance and ease



## EASY CONNECTIVITY

The GeoMax Zoom30 Pro manual total station includes an environmentally protected USB port, internal Bluetooth® and a cable connection port that allow for fast, simple and dependable data transfer between the instrument and your PC or handheld controller using easy to connect Plug and Play technology.



## COLOUR TOUCH SCREEN

The extra large 3.5" colour touch screen with Q-VGA display provides brilliant readability even in strong sunlight. Together with an extra-large high-resolution display, the easy-to-use graphical interface makes regular tasks like stake-outs easier and more productive than ever before.



## HIGHEST FUNCTIONALITY

The Zoom30 Pro enables outstanding non-prism distance measurement over 600 m. A complete suite of applications including road design, area & volume calculations and dedicated graphical construction layout enable you to complete your daily tasks, efficient and reliable.

### GeoMax Zoom30 Pro accXess6

Distance measurement to reflector and 600 m reflectorless measurement.

### GeoMax Zoom30 Pro accXess4

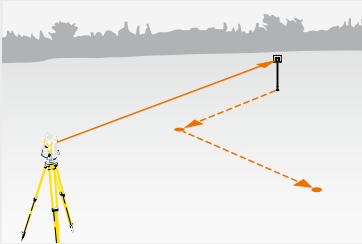
Distance measurement to reflector and 400 m reflectorless measurement.

## Technical data

Hz, V Standard deviation (ISO 17123-3)	2", 3", 5", 7"
Compensator system	Quadruple-axis compensation
Measuring range with circular prism	3,500 m
Accuracy on reflector (Fine/Tracking)	2 mm + 2 ppm / 3 mm + 2 ppm
Reflectorless range accXess 6 / accXess 4	600 / 400 m
Accuracy reflectorless	2 mm + 2 ppm (>500 m 4 mm + 2 ppm)
Communication	USB, Bluetooth, USB host, RS232







### POWERFUL APPS

Every Zoom30 Pro series instrument comes with a complete range of powerful applications:

- Survey and coding
- Set-up with resection
- Set out
- Area 3D and volume
- Remote elevation
- Construction
- Reference line
- Reference arc
- Grid setout
- Column offset
- CoGo routines
- Missing line measurement
- Two prism offsets
- Road 2D
- Road 3D



# GeoMax Zoom20 accXess Series

Class-leading reflectorless measurements



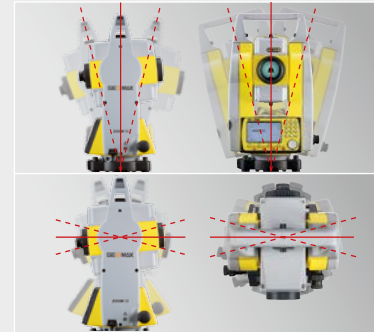
## accXess™ EDM TECHNOLOGY

GeoMax's accXess EDM technology delivers outstanding dependability and class leading accuracy with and without a prism in even the most difficult conditions.



## EASY CONNECTIVITY

The GeoMax Zoom20 accXess includes an environmentally protected USB port and a cable connection port that allow for fast, simple and dependable data transfer between the instrument and your PC or handheld controller using easy to connect Plug and Play technology.



## QUADRUPLE-AXIS COMPENSATION

With advanced electronic compensators, GeoMax instruments are always level and collimation errors corrected. Quadruple-axis compensation is standard on all GeoMax total stations which means you can be sure of maximum reliability with both horizontal and vertical angles.

### GeoMax Zoom20 accXess4

Distance measurement to reflector and 400 m reflectorless measurement.

## Technical data

Accuracy	1", 2", 3", 5"
Compensator system	Quadruple-axis compensation
Prism range / accuracy	3,500 m / 2mm + 2ppm
Long range / accuracy	10,000 m / 5mm + 2ppm
Reflectorless	400m / 2 mm + 2 ppm
Communication	USB, RS232







### COMPLETE SYSTEM

GeoMax not only provides you with a highly productive instrument but also with a complete set of accessories to meet your demanding tasks. With everything in one box.

### POWERFUL APPS

Developed to take on a multitude of daily tasks, the Zoom20 accXess offers a wide range of highly productive applications from setting up, measuring, setting out and checking, be certain that GeoMax “works when you do”.



# GeoMax Zoom20 Pro Series

Withstanding the toughest environments



## ONBOARD SOFTWARE

Easily control your data with the flexible and easy-to-use onboard software. Areas and volumes, reference elements, CoGo and more can be accessed using the large graphic display. Import and export in the format you want for total control and flexibility.



## accXess™ EDM TECHNOLOGY

GeoMax's accXess EDM technology delivers outstanding dependability and class leading accuracy with and without a prism in even the most difficult conditions. Reflectorless accXess EDM technology is available as accXess2 (250 m) and accXess4 (400 m) on the GeoMax Zoom20 Pro series.



## BUILT FOR ALL ENVIRONMENTS

The Zoom Pro withstands the toughest environments. With the optional polar certification, the Zoom Pro is individually tested at  $-30^{\circ}$  C. With our extensive factory tests, you can be sure that GeoMax "works when you do!".

## Technical data

Hz, V Standard deviation (ISO 17123-3)	2", 3", 5", 7"
Compensator system	Quadruple-axis compensation
Measuring range with circular prism	3,500 m
Accuracy on reflector (Fine/Tracking)	2 mm + 2 ppm / 3 mm + 2 ppm
Reflectorless range accXess 4 / accXess 2	400 / 250 m
Accuracy reflectorless	2 mm + 2 ppm
Communication	USB, RS232

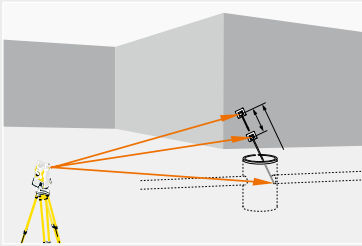


### GeoMax Zoom20 Pro accXess4

Distance measurement to reflector and 400 m reflectorless measurement.

### GeoMax Zoom20 Pro accXess2

Distance measurement to reflector and 200 m reflectorless measurement.



### POWERFUL APPS

Every Zoom20 Pro series instrument comes with a complete range of powerful applications:

- Survey and coding
- Set-up with resection
- Set out
- Area 3D and volume
- Remote elevation
- Construction
- Reference line
- Reference arc
- Grid setout
- Column offset
- CoGo routines
- Missing line measurement
- Two prism offsets





# GeoMax Zipp20 Open WinCE® Series

Fully open Windows® CE, operate the field software of your choice



## TOTALLY OPEN WinCE®

The Zipp20 is a fully open WinCE® total station. Featuring GeoMax FieldGenius, GeoMax Layout Pro, X-PAD, Carlson SurvCE or any localised field software, the Zipp20 allows you to work as best fits your needs. WinCE® even allows you to run your own developments and to personalise your system.

## TOTALLY CONNECTED

With integrated Bluetooth® and the capability to connect to any tablet or data logger, the Zipp20 provides you with the highest flexibility. Data and file exchange using the USB stick makes working with the Zipp20 simple and easy.

## TOTALLY FEATURED

All the openness and connectivity combined with a system offering a colour & touch display, long range non-prism measurement and all your favourite Windows® CE applications make the Zipp20 the total station that “works when you do.”

## Technical data

Accuracy (ISO 17123-3)	2", 5"
Range with prism	3,000 m
Non-prism range	250 m / 400m
Accuracy with prism	2 mm + 2 ppm
Non-prism accuracy	3 mm + 2 ppm
Measuring time (Tracking/Quick/Fine)	0.33 sec / 2.0 sec / 2.4 sec
Reflectorless measuring time	3.0 – 6.0 sec

### GeoMax Zipp20 R2

Distance measurement on reflector and 250m reflectorless.

### GeoMax Zipp20 R4

Distance measurement on reflector and 400m reflectorless.



# GeoMax Zipp10 Pro Series

Your economic choice when price counts as much as performance



## EASY CONNECTIVITY

The Zipp10 Pro features a simple transfer using a USB stick of all your data and files. Transferring data between different total stations or the office is now easier than ever and liberates you from the need to use any PC.

## PERFORMANCE, ROBUSTNESS

Providing a 250 m reflectorless measurement range, a long prism range of 3,000 m, a coaxial visible laser beam combined with a dust and water resistant sealed durable housing, makes the Zipp10 Pro a top performer in its class.

## MULTIFUNCTIONAL KEYBOARD

With an ergonomic full numeric keypad for rapid navigation and data entry provides for direct access to apps and fast navigation. The large high-resolution bright display provides brilliant readability even in strong sunlight.

## Technical data

Accuracy (ISO 17123-3)	2", 5"
Range with prism	3,000 m
Non-prism range	250 m
Accuracy with prism	2 mm + 2 ppm
Non-prism accuracy	3 mm + 2 ppm
Measuring time (tracking/quick/fine)	0.33 sec / 2.0 sec / 2.4 sec
Reflectorless measuring time	3.0 - 6.0 sec

### GeoMax Zipp10 R2

Distance measurement on reflector 250 m non-prism distance measurement.



## APPLICATIONS

- Data collect and coding
- Set out
- Resection
- Area and volume
- Remote elevation
- Reference Line
- Missing line
- Road

# GEOMAX GNSS

Ensure ultimate reliability with GeoMax GNSS systems under the most severe conditions. Providing true cost-effectiveness, these systems are equipped with the latest GNSS technology in the field increasing your productivity and taking your performance to the new level.







# GeoMax Zenith35 Pro Series

Full spectrum of satellite signals, unlimited connectivity and Tilt&Go functionality



## FULL FREEDOM



A corner of a building or even a gully under a parked car? The unique Zenith35 Pro Tilt&Go functionality allows you to measure points where a vertical placement of the pole is not possible such as house corners.

No longer worry about keeping your pole strictly vertical, just Tilt & Go! Seamlessly integrated into the field software, the Zenith35 Pro TAG offers two modes perfectly adapting to the measurement situation.

## FULL CONNECTIVITY

- Access from any device connected to the internet, independent of your location
- Connect up to 10 rovers simultaneously via GSM with Zenith35 Pro DynDNS technology
- Bluetooth and WiFi connection
- 3.75 G GSM for NTRIP connections
- Powerful UHF for base-rover setups
- USB port for data transfer
- Serial port for data output

## FULL SKY

- 555 channels multi constellation and multi frequency, ready for all today's and tomorrow's GNSS systems, including Galileo and BeiDou.
- NovAtel onboard - Cutting-edge GNSS technology
- Zenith35 Pro ExtraSafe mode - Working under heavy canopy or when most reliable results are required, this feature adapts to different working conditions.
- 20 Hz position output as default.

## Technical data

AdVance® technology	High fix availability + reliability
Quality modes	Selectable, ExtraSafe, Standard
Channels	555, multi-frequency
Satellite signals	GPS L1,L2,L2C,L5; GLONASSL1,L2,L3*; BeiDouB1,B2,B3** Galileo E1,E5a,E5b, AltBOC,E6**; EGNOS;WAAS,MSAS,GAGAN, QZSS***
Positioning rate	20Hz
Accuracy static H / V	3 mm ± 0.5 ppm (rms) / 5 mm ± 0.5 ppm (rms)
Accuracy kinematic H / V	8 mm ± 1 ppm (rms) / 15 mm ± 1 ppm (rms)
Accuracy static long H / V	3 mm + 0.1 ppm (rms) / 3.5 mm + 0.4 ppm (rms)
Accuracy tilt sensor	0.1° - 3.4 mm at 2 m pole height

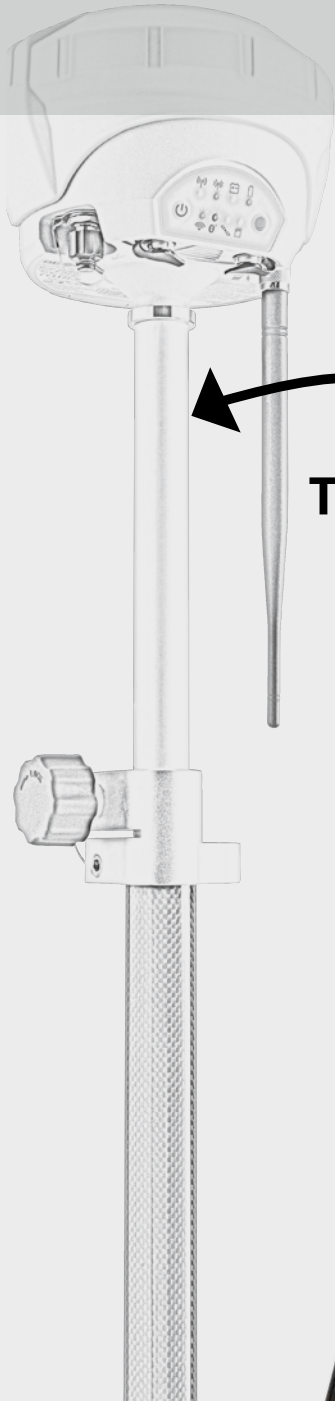
\* Glonass L3 will be provided through future firmware upgrade.

\*\* Believe to comply. Subject to ICD description availability. The position accuracies depend on various factors including the number of satellites, geometry, ionospheric conditions, multipath, etc

\*\*\* Support of QZSS is incorporated and will be provided through future firmware upgrade when QZSS will be operational.

	GSM - UHF	Tilt&Go
Zenith35 PRO	✓	
Zenith35 PRO TAG	✓	✓





**Tilt&Go**





# GeoMax Zenith15/25 Pro Series

Built to last, built for the future



## EXTREMELY RUGGED

The Zenith15/25 Pro GNSS series provides IP68 dust- and waterproofness, enabling use even in extreme environments. The system is robust enough to withstand a 2 m topple over and a complete submersion under water.



## NovAtel™ ON BOARD

Equipped with Measurement Engines from NovAtel, a leading provider of high precision GNSS, Zenith15 and Zenith25 Pro receivers provide the maximum performance.



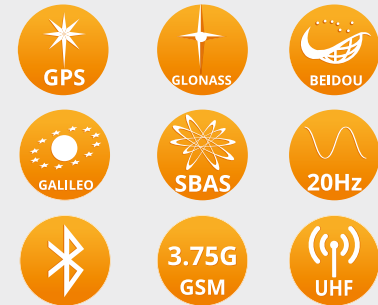
## Q-Lock™ TECHNOLOGY

The Q-Lock™ technology tracks all satellites with the highest available signal strength and performs regular independent checks to ensure that you can work even in challenging environments such as urban canyons or under heavy foliage.

## Technical data

Q-Lock™ technology	High fix availability + reliability
Channels	120, dual frequency
Satellite signals	GPS, GLONASS BeiDou*; Galileo**; SBAS
Positioning rate	5 Hz, 20Hz**
<b>Accuracy [mm ± ppm] (rms)</b>	
Accuracy static H / V	Zenith25 Pro: 3 ± 0.5 / 5 ± 0.5 Zenith15: 5 ± 0.5 / 10 ± 0.5
Accuracy kinematic H / V	Zenith25 Pro: 8 ± 1 / 15 ± 1 Zenith15: 10 ± 1 / 20 ± 1
Accuracy static long H / V	3 mm + 0.1 ppm (rms) / 3.5 mm + 0.4 ppm (rms)

Measurement accuracy and reliability are dependent on various factors including satellite, geometry, obstructions, observation time, ionospheric conditions, multipath, etc. Figures quoted assume normal to favourable conditions. \* Opt. for Zenith25 Pro Incl. in Zenith25 Pro4; \*\* Opt. for all Zenith25 Pro





1.37

METER

1.40

1.45

1.50



# GeoMax PicPoint – Contactless GNSS

## GEOMAX PICPOINT

With “**PicPoint**” you can easily measure points directly in the field that cannot be measured with conventional GNSS measurements such as on façade points or objects with restricted access possibility. “PicPoint” combines GNSS measurements with images, taken from the PicPoint camera attached to the pole. The innovative X-PAD Field Software running on an Android tablet uses photogrammetric



principles to enable a point determination, CAD drawings and various COGO calculations such as Area and Tie Distance. Of course measured points are visualised in the image allowing a visual completeness check of your survey directly on site. And if you should ever have missed to measure some points, this can be done easily in the office.

In all the listed situations, the **PicPoint** is a practical, fast and accurate solution that can be combined with any receiver of the GeoMax GNSS portfolio.

## KEY SPECIFICATIONS:

- Range: up to 25 m
- Accuracy: Relative 5 mm / Absolute: 5cm
- Resolution: up to 18 Megapixels
- Battery: up to 350 images
- Water-& Shockproof
- Weight: 160 g





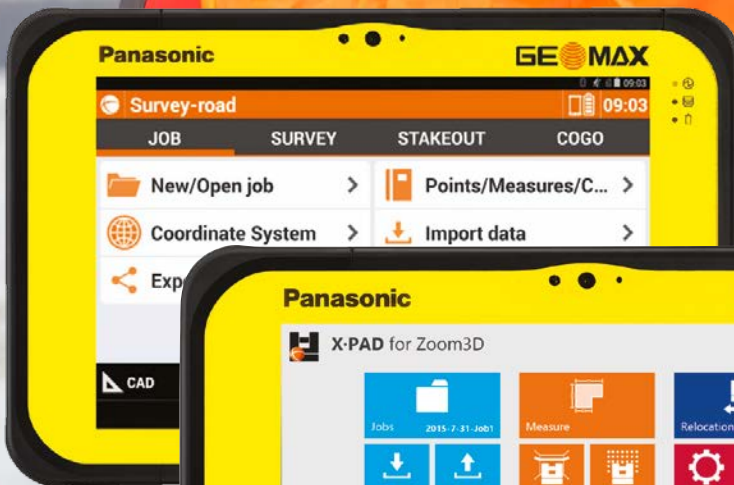
	Zenith15	Zenith25 Pro	Zenith25Pro <sup>4</sup>	Zenith35 Pro	Zenith35 Pro TAG
<b>Measurement Engine</b>					
Channels		120		555	
GPS tracking		L1, L2, L2C		L1, L2, L2C, L5	
GLONASS tracking		L1, L2		L1, L2, L3*	
BeiDou tracking	-	B1 opt.	B1,B2	B1, B2, B3** opt.	
Galileo tracking	-	E1 opt.	E1, E5b opt.	E1, E5a,E5b, AltBOC, E6** opt.	
Positioning rate	5 Hz	5 Hz 20 Hz opt.	5 Hz 20Hz opt.	20 Hz	
SBAS	EGNOS, WAAS, MSAS, GAGAN			EGNOS, WAAS, MSAS, GAGAN, QZSS***	
<b>Tilt &amp; Go</b>					
Single / Dual Mode		-		-	Yes
<b>ACCURACY**</b>					
Static H/V (mm + ppm)	5 + 0.5 / 10 + 0.5	3 + 0.5 / 5 + 0.5		3 + 0.5 / 5 + 0.5	
Kinematic H/V (mm + ppm)	10 + 1 / 20 + 1	8 + 1 / 15 + 1		8 + 1 / 15 + 1	
Static long H/V (mm + ppm)	3 + 0.1 / 3.5 + 0.4	3 + 0.1/ 3.5 + 0.4		3 + 0.1/ 3.5 + 0.4	
<b>COMMUNICATION</b>					
GSM/GPRS module	3.75 G			3.75 G	
UHF radio module	500 mW, 1000 mW; selectable			500 mW, 1000 mW; selectable	
	Optional	Optional	Included	Included	
Bluetooth®	Yes			Yes	
WiFi	-			Yes	
Remote Configuration via DynDNS	-			Yes	
Communication port	USB, serial and power			USB, serial and power	
<b>INTERFACES</b>					
Data recording	Removable microSD card			Removable microSD card and 4 GB internal memory	
GSM / TCP / IP	Removable SIM card			Removable SIM card	
PicPoint support	yes			yes	
X-Pole support	yes			yes	
<b>POWER SUPPLY</b>					
Operating time (static/rover)	7.5 h / 5 h	9 h / 6 h	9 h / 6 h	8h / 6h	
<b>PHYSICAL SPECIFICATIONS</b>					
Dimensions / Weight	1.07 kg without battery			1.17 kg without battery	
Operating temperature	- 40°C to 65°C			- 40°C to 65°C	
Protection class	IP68			IP68	
Humidity	100%, condensing			100%, condensing	
Vibration	Mechanical stress resistant according ISO 9022-36-05			ASAE EP455 Section 5.15.1 Random, MIL-STD-810G, method 514.6E-I	
Shock	Withstands 2m topple over onto hard surface			Withstands 2 m drop onto hard surface	
<b>Warranty</b>					
Standard Warranty	1 year			1 year	
Extendable warranty	-	yes	yes	yes	

\* Glonass L3 will be provided through future firmware upgrade. \*\* Believe to comply. Subject to ICD description availability. \*\*\* Support of QZSS is incorporated and will be provided through future firmware upgrade when QZSS will be operational

# GEOMAX FIELD CONTROLLERS

Based on an open platform, just use the software that fits best your requirements and rely on the robustness and precision of these easy-to-use devices.







# GeoMax Zenius5 W

## Versatile Field Controller



### FULLY FEATURED, FULL FLEXIBILITY

The Zenius5 W is a versatile handheld fully packed with everything needed to do the job. If you are looking for flexibility in software and versatility in handling connections to hardware in the

field or in the office, this unit is for you.

This rugged field ready Windows Mobile® handheld is built to meet GeoMax requirements for power, functionality and reliability, ensuring they always “work when you do”.

The onboard 5MP camera helps with daily documentation tasks by taking photos and storing them as notes.

### Technical data

Channels	72 channel uBlox
Satellite signals tracked	GPS, GLONASS, BeiDou, Galileo; single frequency
RTK accuracy	2.5 m CEP (Auto.) / 2.0 m CEP (SBAS)
SBAS	WAAS / EGNOS / MSAS / GAGAN
Operating system	Windows embedded handheld 6.5 Professional
Memory	512 MB program memory, 8 GB storage capacity, MicroSD card slot
USB	Mini waterproof USB connector
Wireless	Integrated quad-band GSM/GPRS, phone function
Bluetooth®	Bluetooth® V2.1 support EDR
Wi-Fi	802.11 a/b/n Wireless LAN
Cellular	3.75G cellular modem
Camera	AutoFocus 5 MP
Power	up to 10 hours



Windows Mobile®  
6.5 Professional

Micro SD card

72 channel  
u-Blox GNSS

WiFi

Bluetooth®

Smart battery

RS232 port

Status LED's

5 MP camera

Crystal clear  
display

Glove-proof keyboard

USB OTG port



# GeoMax Zenius8

## Rugged WinMobile & Android Field Controller



### POWERFULL AND ROBUST

The GeoMax Zenius8 is a premium class field controller with unmatched user friendliness, class-leading performance, and the highest flexibility and ruggedness. Due to its capability to mount a high performance long range Bluetooth cap, it is the ideal

device to control the GeoMax Zoom90 robotic total station in one man operation.

The unique flexibility in choosing the Operating System, combined with unmatched performance and outstanding robustness, makes the Zenius8 field controller of choice. It's performance without compromising quality.

### KEY FEATURES:

- Flexible Operating System Concept
  - Windows Embedded Handheld 6.5 Professional
  - Android 5.0
- GeoMax customized operating system, for perfect match with GeoMax Soft- and Hardware
- Large 4.7" Full Wide VGA display
- 8 Mega Pixel Camera for geo-tagged site documentation
- Large memory
  - 1 GB RAM, 4 GB Storage
- Special rain/wet mode optimized for outdoor use
- Optional Long Range Bluetooth cap
- MicroSD card support
- RS232, USB, Bluetooth and Wi-Fi connectivity for maximum flexibility
- Inbuilt 56 channels multi constellation GNSS
- Hot swappable battery concept
- Light weight – 490g including battery
- Rugged
  - IP67 dust & waterproof
  - Vibration resistant according MIL standard

### Technical data

Processor	Texas Instruments 4470 dual-core @ 1.5 GHz
Memory/Disk	1 GB RAM/4 GB iNAND Flash
Operating System	Windows Embedded Handheld 6.5.3; Android 4.2.2
Screen	4.7" FWVGA (854x480); IPS; 600 nits, capacitive multi-touch Asahi Dragontrail chemically strengthened glass
Keypad	Numeric with 3 programmable function keys
Battery	Li-Ion, 3.7V 5200mAh (19.2 Wh) (Warm-swappable) with smart gauge
Communication	Audio: Built in: Receiver, loud-speaker; mic BT: Class 2 (10 m), v3.0 in Android OS and v2.0 in Windows Mobile OS Wireless LAN: 802.11 b/g/n
Navigation	Integrated with stand-alone u-blox® GPS
Camera	8-megapixel rear-facing camera with autofocus and LED illumination



# GeoMax Field Controllers

## Overview

	Zenius5 W	Zenius 8
Primary use case	GNSS	Robotic TPS
Processor Speed	1 GHz	1.5 GHz
Operating system	WinMobile	WinMobile & Android
Screen size	3.7"	4.7"
USB Host port	Via adaptor	Yes
Camera resolution	5 MPix	8 MPix
Camera flash	-	Yes
Hot swappable batteries	-	Yes
Env. Protection (IP)	65	67
Rain/wet mode	-	Yes
Weight (incl. battery)	575 g	490 g
Int. Memory - RAM	512 MB	1 GB
Int. Memory - Storage	8 GB	4 GB
Battery lifetime	8.30 h	7.30 h
Smart battery	Yes	-
GSM	3.75 G	-
GNSS channels	72	56
Max. Bluetooth range*	Up to 800 m	> 600 m (with LRBT cap)
GNSS constellations	GPS/GLO/BD	GPS/GLO/SBAS/QZSS
Warranty	1 year	1 year

\* Optimal conditions, free line of sight

# GeoMax FZ-M1 & FZ-B2

Fully rugged tablets to support the most severe weather conditions



## CONNECTIVITY AND PERFORMANCE

Resistant to challenging working conditions with extreme performance thanks to their flexible configurations, Bluetooth™ and WiFi™ connectivity, and a powerful processor.



## DESIGNED FOR FIELD PROFESSIONALS

Their ergonomic and lightweight design naturally fits into your hands, and once there, the Windows™ 8.1 for FZ-M1 or Android® 4.4 for the FZ-B2 functionality will boost your performance not matter the challenge you face.



## FULLY RUGGED

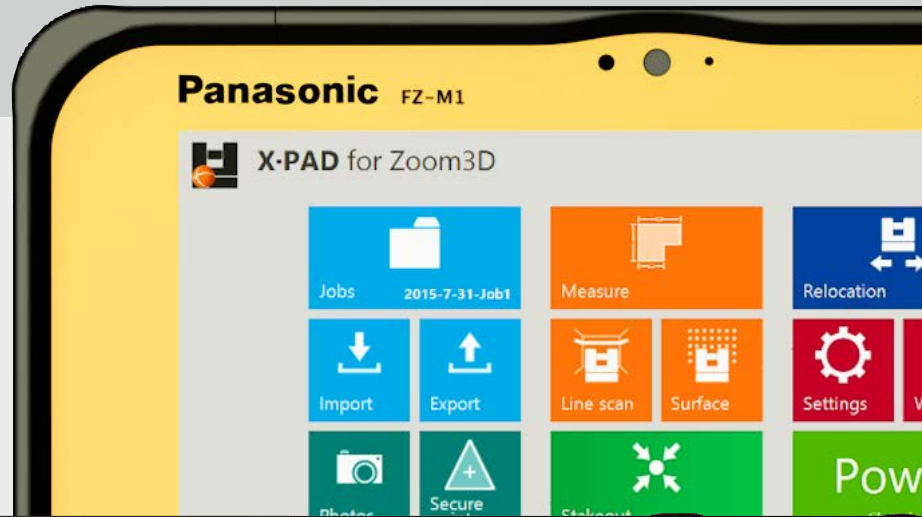
Outdoor can hide nothing from these tablets. Its multi-touch and sunlight-viewable screen allows you to interact with it without even taking off your gloves. And because accidents in the field can happen, these tablets are also shock resistant and water and dust proof.

### Technical data

	FZ-M1	FZ-B2
Mobile computing platform	Intel Celeron® N2807 processor 1,58 GHz 1MB L2 Cache	Intel® Celeron 1.83 GHz N2930 processor
Operating system	Windows™ 8.1 Pro	Android® 4.4
RAM	2 GB	2 GB
Camera 2 MP front / 5 MP rear	•	•
WLAN Intel® Dual Band Wireless - AC7260	•	•
Bluetooth® 4.0 + EDR Class 1	•	•
7" sunlight-viewable WXGA Active Matrix (TFT) IPS LCD with circular polarizer (up to 500cd/m2 brightness); multi-touchscreen	•	•



 Windows 8





# GEOMAX LASER SCANNER

A rugged and reliable Time-of-Flight laser scanner recommended for all working environments.



# GeoMax Zoom300

Rugged and dependable time-of-flight laser scanner



## ROBUST AND EASY-TO-USE

Simple to use and ready to scan at the press of a button, the Zoom300 can be controlled and operated directly from all kinds of mobile devices with a WLAN connection.

The GeoMax laser scanner works under extreme weather conditions and is water and dust proof.



## PERFORMANCE

The Zoom300 supports four scan modes at different resolutions.

Depending on the object and the area to scan, you can define the best resolution to optimise scan time and the size of data output.



## SURVEY GEOREFERENCING WITH GPS/GNSS

Now it is possible to use a GPS/GNSS receiver to calculate the scan position and to georeference the point cloud data. Mount a GPS/GNSS antenna on the Zoom300 and the orientation will be calculated from a reference target with known coordinates using a second GPS/GNSS receiver.

The equipment ensures accuracy and precision for all 3D projects using a single 3D reference system.

## Technical data

Max / Min range	300m 100% reflectivity (on white target) / 2.5m
Operating conditions	250m
Vertical / Horizontal field of view	90° (-25° +65°) / 360°
Scan rate	40.000 points/sec
Laser beam divergence	0.37mrad
Resolution	37mm x 37mm 100m
Accuracy	6mm 50m / <10mm 100m



# GEOMAX MICRO ROBOTIC SOLUTION

Easy-to-use and fast 3D measuring instruments, the Zoom3D is ideal for indoor as well as outdoor applications. It can be upgraded to an innovative and user-friendly micro robot.





# GeoMax Zoom3D Series

## Easy-to-use and fast micro robotic solution

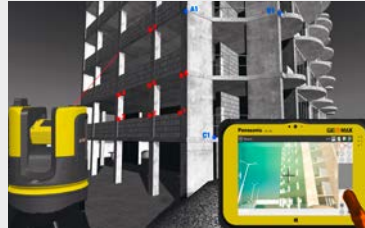


### PLUG AND PLAY SOLUTION

3D measurements have never been so easy and fast. With simple configuration and self-leveling feature, the Zoom3D will speed up your daily work indoors and outdoor.

### GET STARTED WITH THE PRESS OF TWO BUTTONS

1. Place your Zoom3D on the floor or on the tripod
2. Turn it on. The Zoom3D automatically levels
3. Connect it to your datalogger and start working!



### UPGRADE IT TO A MICRO ROBOT SOLUTION

Save time and resources by upgrading your Zoom3D to a Micro Robotic Solution for all your one-man operations. Its powerful software is equipped with a target recognition technology, automatically aiming and tracking the target mounted on a standard TPS pole. The Zoom3D is the ideal partner for all daily tasks in any small construction site for all daily tasks, from as-built survey to the stake out.



### YOUR PERFECT PARTNER FOR INDOOR SOLUTIONS

Easy levelling, plumbing points and staking out - the Zoom3D unique and user-friendly onboard software comes with a full set of features that will speed up your interior applications. Fast and exact results can be easily exported in the most common data format and all at the best-price-to performance.



### Technical data

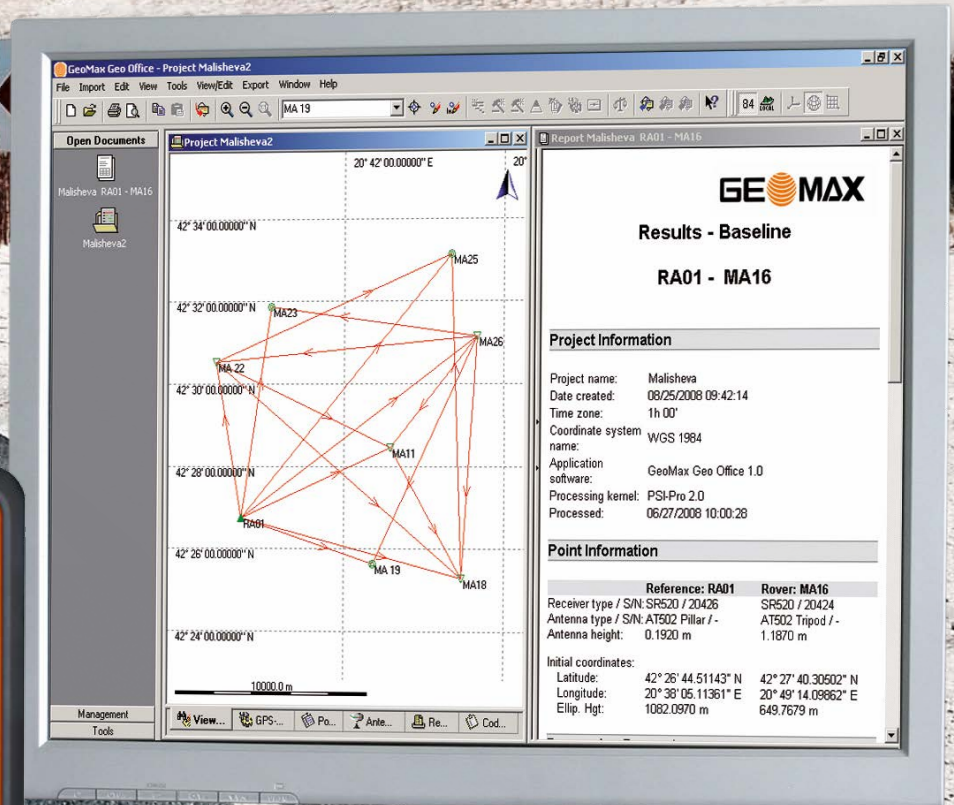
Goniometer (Hz/V) range and accuracy	Horizontal 360°; Vertical 250°; 5", equates to 1.2 mm @ 50 m
Laser distance meter	Coaxial, visible red laser; Class 2; 650 nm; < 1 mW
Range	0.5 - 50 m
Tie distance accuracy (3D)	Angle and distance combination @10m / 1mm; @30m / 2mm; @50m / 4mm
Tilt sensor self-leveling range	± 3°

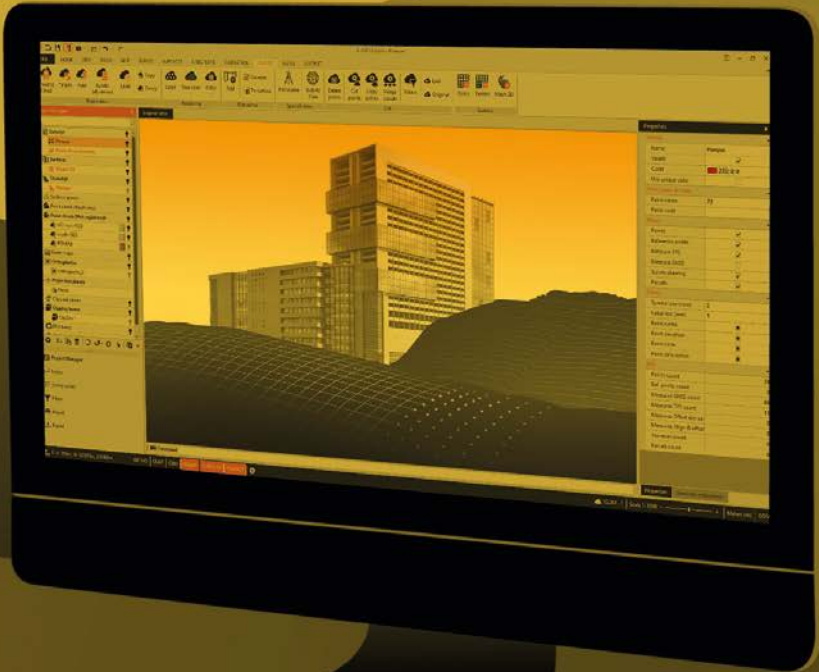
# GEOMAX SOFTWARE

All GeoMax software is developed to make your daily work more easy and flexible. Highly innovative contents as well as simple and intuitive interactions with the system.











# GeoMax X-PAD Office Fusion

## The Geospatial Data Office Software

A new concept of software for processing all types of geospatial data with real integration of different information: experience easy import of data, calculations, adjustments, scan registration and management of the clouds, points, measures, surfaces and images, topographical utilities and drawing functions. And this all in one application.

### ONE SOFTWARE FOR ALL WORKFLOWS

From import to final drawings, X-PAD Office Fusion offers you the best tools without having to pass data from one program to another. You can load data from total station, GPS, digital level and laser scanners and calculate, view and manage in one software. You can connect TPS survey, GPS survey, levels, laser scanner sessions and see everything together.

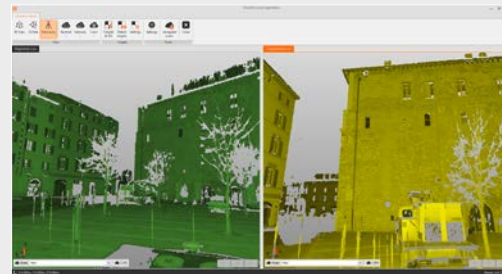
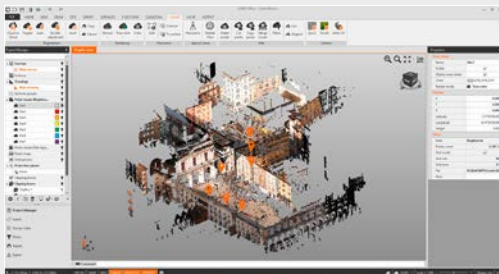
A modern working environment, designed to manage geospatial data, and a powerful CAD 3D are the basic framework on which topographic and laser scanner modules have been developed.

### TOPOGRAPHIC MODULE

Topographic module includes calculations and adjustment procedure for TPS, GNSS and digital level data. Data can be handled not only in graphic way but also on grids with countless powerful functions for searching, filtering and editing.

### SCAN MODULE

With the Scan Module it is possible to extract surfaces and meshes, contour lines, cross-sections and orthophotos from points and point clouds to get immediately the final results ready to plot. From surfaces, it is possible to calculate volumes. Point clouds can be registered with an automatic or manual procedure by specifying common points or reference coordinates. The targets are automatically recognized and reduce the registration time and improve the data quality. A final Bundle adjustment procedure allows you to get the best possible solution by considering all the scans as a whole.



# GeoMax X-PAD Survey

Innovative field solution for surveyors

X-PAD Survey offers stakeout and control, ensuring productivity and flexibility in the field, providing perfect integration between measurement tools. The X-PAD Survey was developed for two platforms (Android and Windows Mobile) with amazing new features that will forever change the way you work.

## SURVEY & DATA COLLECTION

With X-PAD Survey it is possible integrate to the position, photos, notes, GIS attributes and voice comments - all information that in the office can be useful to create the final drawings or for the design phases. Photos and images are a memory that remains over time and gives more value to a coordinate.

## STAKEOUT

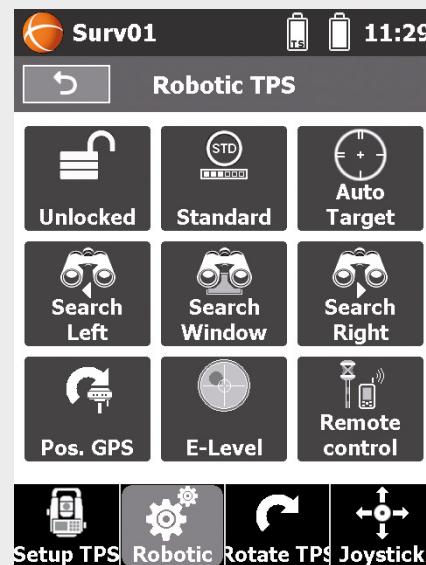
Stakeout with X-PAD has never been easier or faster. Voice guidance allows you to arrive at the point without even looking at the display while the large compass simplifies visual navigation. There is no need to prepare the points list for staking out in X-PAD as you can stakeout directly from the imported CAD drawing. Every drawing element, including points, lines, arcs and every position, determined within the graphical view can be staked out.

## A TOPOGRAPHIC CAD

X-PAD Survey includes a real topographic CAD, not just a simple graphic viewer, with specific functions to draw, edit and calculate the position of new elements that can be then used in the stakeout operations.

## ADDITIONAL FEATURES

A lot of additional features are available as the Map viewer that now includes also WMS services; the X-Pole system that allow to integrate the use of TPS and GNSS; X-Live to direct exchange data from field to field and from field to office; and also other tools like First person view, Augmented reality and Automatic updates.



# GeoMax X-PAD Construction

Switch on and measure. The onsite measuring equipment for everyone.

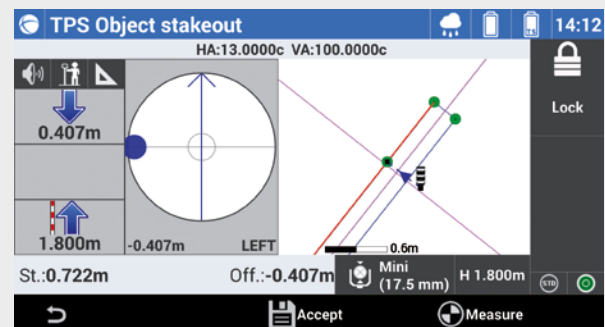
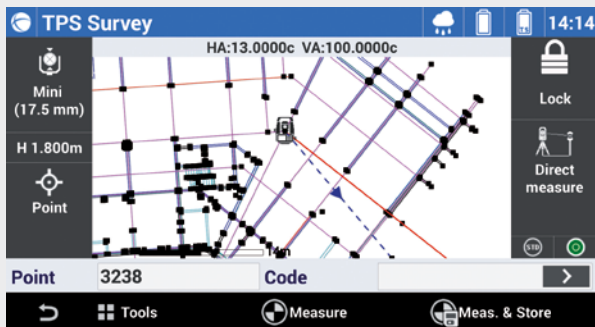
X-PAD Construction is the ideal solution for all your measuring construction needs - measuring all construction activities in an efficient and productive way. X-PAD Construction, combined with the total station or GPS, allows you to perform the measurement, stakeout and control with simple and functional procedures.

X-PAD Construction includes specific setup procedures for total station and GPS that are usually applied in construction sites for daily activities of tracking and measurement. Powerful functions for the verification of the constructed and the comparison within the project include:

- Check of elevations on horizontal and sloped levels
- Check of distances between points and elements
- Check of angles
- Calculation of surfaces and perimeters
- Continuous check of the quality of work and the progress

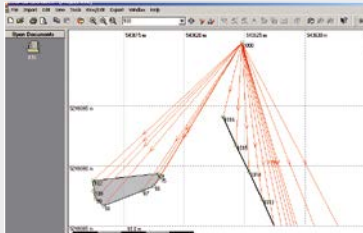
## ANDROID & WinMobile

X-PAD Construction is based on X-PAD Survey from which inherits many features and functionality and is available in Android version and Windows Mobile.



# GeoMax Geo Office (GGO)

The ideal companion for your GeoMax equipment



## EASY-TO-USE

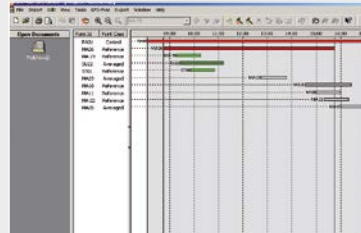
Following Microsoft Windows standards, GGO is easy-to-use, even for novice PC users. Through the use of icons and graphics working with data in GGO is as easy as “point and click”.

## RINEX IMPORT/EXPORT

Support of GNSS processing using multiple sensor brands is assured thanks to the GGO's RINEX Import/Export option. By using the industry standard RINEX format you can import third party receiver data and post-process in GGO.

## PREPARE, VISUALIZE AND EDIT

GGO has a full suite of tools that allow you to get the most out of your equipment before going



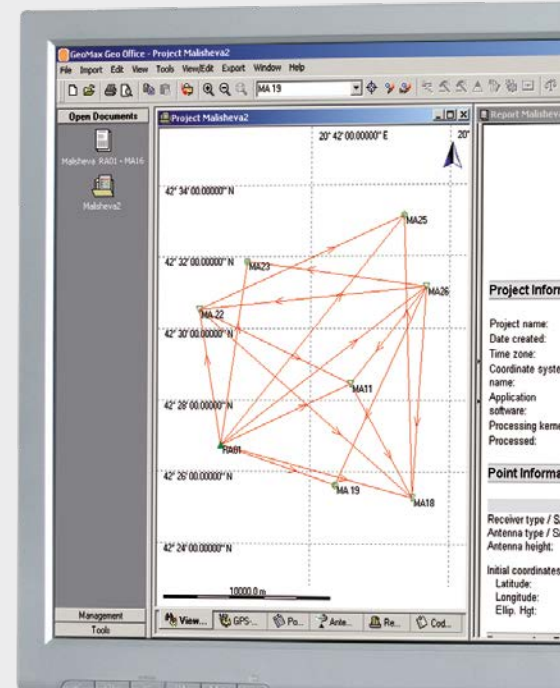
on-site. Once you've completed your survey and seamlessly imported your field results into GGO, all observations are immediately available for visual confirmation of field activities. If errors or changes are found they can be easily edited to deliver perfect results.

## DATA PROCESSING AND REPORTING

When post-processing of GNSS data is required, GGO provides state-of-the-art technology to guarantee you always produce optimal results. Simply import data and GGO will automatically process all possible GNSS baselines. Once results are available they can be presented in customized reports.

## LEAST SQUARES ADJUSTMENT

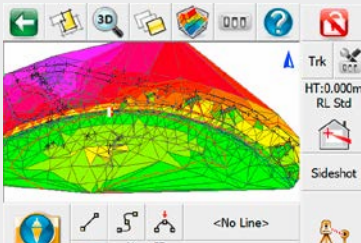
Available a rigorous 3D least squares adjustment package. This option allows the adjustment using least squares of GNSS, total station and combined data using a variety of different parameters and coordinate systems. The results are stored in well-designed HTML reports.





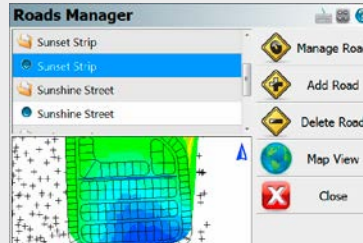
# GeoMax FieldGenius Premium

Powerful data collection for all your daily surveying tasks in the field



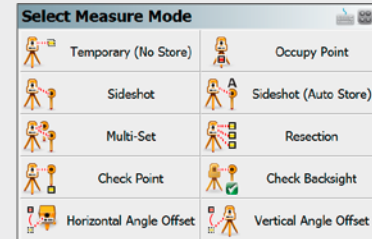
## DIGITAL TERRAIN MODELING, VOLUMES AND CONTOURING

FieldGenius has the ability to create & utilise DTM surfaces from existing survey data or create a DTM in real-time as the data is collected. The TIN and contours will automatically update with each new shot.



## POWERFUL ROADING

FieldGenius roading allows you to manually input or import your alignment data including centerline, vertical and template data. Stake your points along your alignment with confidence.



## INSTRUMENT CONTROL AT YOUR FINGERTIPS

Total Station and GPS functions are available on a common and easy-to-use instrument toolbar. Access measuring modes with the click of a button.

All you need in one software

**Total Station**  
Full support



**GNSS**  
Support for RTK GNSS receivers



**Advanced**  
Roading, surfacing, slope staking functions



**Robotic**  
Functionality for robotic total stations





# GEOMAX THE AND LEVELS

GeoMax levelling system  
complete your daily  
with the highest acc  
comfort and robust  
indoor or outdoor, e  
weather conditions.



# THEODOLITE

S

Systems make it easy to  
levelling tasks on time  
accuracy. Rely on their  
ness when working  
even under challenging



# GeoMax Zipp02

Digital theodolite for all your general construction tasks



## CLOSING THE GAP

With vertical compensation and 2" accuracy the Zipp02 provides you with the precision required for your most demanding jobs at an affordable price without adding complexity. Various display modes, hold zero for horizontal angle, a variation of measurement units, simple

distance measurement via stadia lines all make for easy operation with only six keys. Visible laser plummet enables you to set up over a point faster and easier than ever. The Zipp02 is the tool of your choice when it comes to checking angles, alignments, grade work and short range levelling.

## Technical data

Precision	2"
Magnification	30 x
Compensator system	Automatic vertical compensator User set on/off
Display	Double side large character back-lit LCD
Keys	6 one-touch button functions
Operation period w/o laser plummet	36 h



# GeoMax ZDL700 Series

A digital level offering accurate results and fast operation



## QUICK, EASY AND ERROR-FREE

The 3-seconds measurement speed in combination with the simplicity of the one-push measure-and-store functionality provides faster and more economical workflows.

## LEAVE THE CALCULATOR IN YOUR POCKET

Execute all kind of calculations, ZDL700 is equipped with an onboard adjustment program; a height difference calculation; an inverse staff measuring mode; and various measuring configuration.

Based on digital readings and automated calculation, you will never again be slowed down by time-consuming calculator usage.

## ACCURATE

Extensive field tests verify the excellent accuracy of the ZDL700 of 0.7 mm for 1 km double-run level. This makes the ZDL700 an ideal level not only for high order levelling but also deformation measurements and precise surveying, as well as general construction.

### Technical data

Height accuracy	$\pm 0.7$ mm/km
Distance accuracy	D < 10 m, 10 mm D $\geq$ 10 m, 0.001 x D
Maximum range	105 m
Single measurement speed	< 3 seconds
Internal memory	2,000 measurements



# GeoMax ZAL Series

Automatic levels covering from beginner to expert



Intensify your performance and get error-free results at the best price-to-performance ratio.

The GeoMax ZAL Automatic Level series are dependable and durable tools. Available at all skill levels, GeoMax levels enable all construction professionals to work correctly and economically.

With different types of magnification, a new ergonomic and solid-built design, and full range of accessories and services, these automatic levels provide great quality at affordable value.

## Technical data

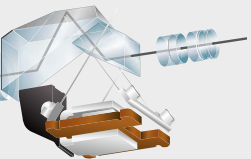
Accuracy		
Standard deviation 1km double-run levelling	1.2 mm	1.5 mm
Image	Erect	Erect
Magnification	30 x	28 x
shortest target distance from instrument axis	0.8 m	0.8 m
Multiplication factor	100	100
Compensator working range / setting accuracy	± 15' / 0.3"	± 15' / 0.3"
Circular level sensitivity	10' / 2 mm	10' / 2 mm
Protection	IP57	IP57



## GeoMax ZAL300 Series

Professional / high precision

	ZAL330	ZAL328
Accuracy	1.2 mm	1.5 mm
Image	Erect	Erect
Magnification	30 x	28 x
shortest target distance from instrument axis	0.8 m	0.8 m
Multiplication factor	100	100
Compensator working range / setting accuracy	± 15' / 0.3"	± 15' / 0.3"
Circular level sensitivity	10' / 2 mm	10' / 2 mm
Protection	IP57	IP57



### GeoMax ZAL200 Series

Professional / standard tasks

### GeoMax ZAL100 Series

Economic choice/ occasional use

ZAL324	ZAL320	ZAL232	ZAL224	ZAL220	ZAL132	ZAL124	ZAL120
2.0 mm	2.5 mm	1.9 mm	2.0 mm	2.5 mm	2.0 mm	2.0 mm	2.5 mm
Erect	Erect	Erect	Erect	Erect	Erect	Erect	Erect
24 x	20 x	32 x	24 x	20 x	32 x	24 x	20 x
0.6 m	0.6 m	1 m	1 m	1 m	1 m	1 m	1 m
100	100	100	100	100	100	100	100
± 15' / 0.5"	± 15' / 0.5"	± 15' / 0.5"	± 15' / 0.5"	± 15' / 0.5"	± 15' / 0.5"	± 15' / 0.5"	± 15' / 0.5"
10' / 2 mm	10' / 2 mm	8' / 2 mm	8' / 2 mm	8' / 2 mm	8' / 2 mm	8' / 2 mm	8' / 2 mm
IP57	IP57	IP56	IP56	IP56	IP54	IP54	IP54



# GEOMAX LASER ROTATORS

Suitable for a wide range of applications GeoMax laser rotators are true multi-purpose tools with an outstanding cost-effectiveness.







## GEOMAX PIPE LASERS

Versatile and fully featured, the GeoMax pipe lasers will adapt the way you work.



# GeoMax Zone Series

From start to finish, covering every need

Construction sites can differ drastically, from modest jobs to compound designs. Construction professionals need tools with extensive range and capabilities to finish the job correctly and economically. The new and powerful GeoMax laser rotators portfolio offers the right construction tools for all trades and applications.

Solid-built and dependable in any element, the GeoMax lasers provide you long-lasting operation from multiple charging options, the flexibility of a full range of interchangeable accessories to accommodate your unique work preference, and all at the best price-to-performance ratio.

**Total Care SHIELD**  
**3 YEARS WARRANTY**

**ERROR-FREE RESULTS**

**LONG-LASTING OPERATION**

**SOLID-BUILT DESIGN**

**INTERCHANGEABLE ACCESSORIES**

**IP68/67 PROTECTION**

**DEPENDABLE IN ANY ELEMENT**

**OUTSTANDING PRICE-TO-PERFORMANCE RATIO**

# GeoMax Zone70 DG

High-end dual grade laser, unbeatable performance



Built with a rock-solid core, this high-end rotation laser offers unbeatable performance and is key for long distance applications where high precision and dependability in all kinds of environmental conditions are needed.



## Technical data

Functionality	Self-levelling horizontal digital slope in dual axis (full-automatic)
Head protection	Fully enclosed
Operating range (diameter)	900 m / 3000 ft
Self-levelling accuracy	± 1.5 mm at 30 m (±1/16" at 100 ft)
Self-levelling range	± 6°
Grade range	Up to 25 %
Rotation speed	300, 600, 900, 1200 rpm
Scanning modes	-
Laser diode type / class	635 nm (visible) / class 1
Batteries type	4-8 D-cell alkaline / NiMH
Battery life	> 40 h
Operating temperature	-20°C to 50°C
Protection	IP67

# GeoMax Zone60 DG

Fully-automatic dual grade laser

Fully-automatic grade specifically designed for construction workers who need the dependability and accuracy of a fully professional grade laser on a daily basis. Align and monitor the laser plane automatically by using the GeoMax ZRD105B receiver.



## Technical data

Functionality	Self-levelling horizontal, vertical, digital slope in dual axis (full-automatic)
Head protection	Fully enclosed, Beam catch and Lock function
Operating range (diameter)	900 m / 3000 ft
Self-levelling accuracy	$\pm 1.5$ mm at 30 m ( $\pm 1/16''$ at 100 ft)
Self-levelling range	$\pm 5^\circ$
Grade range	Up to 15 %
Rotation speed	300, 600 rpm
Scanning modes	-
Laser diode type / class	635 nm (visible) / class 1
Batteries type	4 D-cell alkaline / Li-Ion
Battery life	> 40 h
Operating temperature	-20°C to 50°C
Protection	IP67



# GeoMax Zone60 HG

## Semi-automatic grade laser



Adding easy-to-use, dial-in grade capability to the dependability of the Zone40 H core, this laser is more flexible in use and enables semi-automatic grade in levelling applications.

### Technical data

Functionality	Self-levelling horizontal digital slope in dual axis (semi-automatic)
Head protection	Fully enclosed
Operating range (diameter)	900 m / 3000 ft
Self-levelling accuracy	± 1.5 mm at 30 m (±1/16" at 100 ft)
Self-levelling range	± 5°
Grade range	8 %
Rotation speed	600 rpm
Scanning modes	-
Laser diode type / class	635 nm (visible) / class 1
Batteries type	4 D-cell alkaline / Li-Ion
Battery life	> 40 h
Operating temperature	-20°C to 50°C
Protection	IP67



# GeoMax Zone40 H

## Best construction site laser rotator

Are you looking for performance and absolute dependability? Zone40 H is the best construction site laser for rough environments. Combining solid-built housing with a powerful dependable core, this laser is a long-term companion of choice for any heavy duty levelling task.



### Technical data

Functionality	Self-levelling horizontal manual slope in dual axis
Head protection	Fully enclosed
Operating range (diameter)	900 m / 3000 ft
Self-levelling accuracy	$\pm 1.5$ mm at 30 m ( $\pm 1/16''$ at 100 ft)
Self-levelling range	$\pm 5^\circ$
Grade range	-
Rotation speed	600 rpm
Scanning modes	-
Laser diode type / class	635 nm (visible) / class 1
Batteries type	4 D-cell alkaline / Li-Ion
Battery life	> 40 h
Operating temperature	-10°C to 50°C
Protection	IP67

# GeoMax Zone20 H

## Automatic entry-level laser rotator



Economic and firm entry-level laser rotator. With a solid-built housing and a straightforward interface, this laser offers all functions needed for regular and flexible use.

### Technical data

Functionality	Self-levelling horizontal manual slope in dual axis
Head protection	Fully enclosed
Operating range (diameter)	900 m / 3000 ft
Self-levelling accuracy	± 2.2 mm at 30 m (± 3/32" at 100 ft)
Self-levelling range	± 5°
Grade range	-
Rotation speed	600 rpm
Scanning modes	-
Laser diode type / class	635 nm (visible) / class 1
Batteries type	4 D-cell alkaline / Li-Ion
Battery life	> 40 h
Operating temperature	-10°C to 50°C
Protection	IP67





# GeoMax Zone20 HV

Automatic multipurpose laser rotator

This laser offers the Zone20 H basic specifications plus the capability of vertical levelling. Zone20 HV includes a long-range remote to adjust and align easily in any jobsite. The multipurpose laser for any craftsman.



## Technical data

Functionality	Self-levelling horizontal, vertical, 90° manual slope in dual axis
Head protection	Fully enclosed
Operating range (diameter)	900 m / 3000 ft
Self-levelling accuracy	± 2.2 mm at 30 m (±3/32" at 100 ft)
Self-levelling range	± 5°
Grade range	-
Rotation speed	120, 300, 600 rpm
Scanning modes	10° - 35°
Laser diode type / class	635 nm (visible) / class 2
Batteries type	4 D-cell alkaline / Li-Ion
Battery life	> 40 h
Operating temperature	-10°C to 50°C
Protection	IP67

# GeoMax ZEL400 H / HV

Ideal for interior finishing



Ideal for interior finishing. Compact and solid housing. Fully-featured entry-level performance. NiMH rechargeable battery.



## Technical data

	ZEL400 H	ZEL400 HV
Functionality	Self-levelling horizontal manual slope in dual axis	Self-levelling horizontal, vertical, 90° manual slope in dual axis
Head protection		Open cage
Operating range (diameter)		600 m / 2000 ft
Self-levelling accuracy		± 2.5 mm at 30 m (± 3/32" at 100 ft)
Self-levelling range		± 6°
Grade range	-	-
Rotation speed		0 - 600 rpm
Scanning modes	-	10° - 35°
Laser diode type / class		635 nm (visible) / class 3R
Batteries type		2 D-cell alkaline / NiMH
Battery life		> 60 h
Operating temperature		-10°C to 50°C
Protection		IP54

# GeoMax Zeta125 Series

Versatile configuration, a full range of features and a tough design

## BUILT TO LAST

The robust and rugged design of the Zeta series has a proven IP rating for water and dust – so no matter how quickly water and dirt appear, the pipe laser will keep on working. The Zeta series are also equipped with a durable cast-aluminum housing, that use die casts and extrusions for superior strength.

## ERROR-FREE WORK

Pipelaying needs to be exact over long distances so with a guarantee of  $\pm 10$  arc sec. accuracy during levelling works and a grade setting control of up to 0.001%, Zeta pipe lasers let you work close to error-free. In addition to the accurate levelling core, Zeta125s model features active cross axis compensation for any possible setup mistake.

## SELF-LEVELLING

Set the pipe grade from -10 % to +40%.

## VERSATILE CONFIGURATION

The Zeta125 fits in tight bends and narrow manholes. Its slim build makes it suitable for pipes as small as 125 mm diameter and the Zeta feet ensure users continue working in most any site situation.

### Technical data

	ZETA125	ZETA125S
Self-levelling / grade range	+45% to -15% / +40% to -10%	
Accuracy	$\pm 5$ mm at 100 m ( $\pm 1/16''$ at 100'); $\pm 10$ arc sec.; $\pm .005\%$	
Temperature drift	1"/C arc seconds per degree C	
Cross axis levelling	Manual	Automatic (6°)
Vertical level / Autotarget / Manual alignment	125 model	ü
Beam Type/Output	Visible laser diode; 635nm; <1mW, laser class 2 (Zeta 12 only); < 5mW, laser class 3R (Zeta 125, 125s)	
Protection class	IP68	
Power supply / battery life	Rechargeable lithium ion battery pack; 110/230V AC converter (charge and run simultaneously); 12V power cord / 40h Li-Ion battery	

### The smallest diameter

The Zeta125 fits in tight bends and narrow manholes. Its slim build makes it suitable for pipes with 125 mm (5") diameter and the Zeta feet ensure users continue working in most any site situation.

125 mm / 5"



150mm / 6"



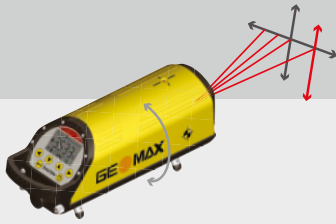
200 mm / 8"



250 mm / 10"







**"S" SERIES MANUAL ALIGNMENT AND AUTOMATIC DUAL AXIS COMPENSATION**

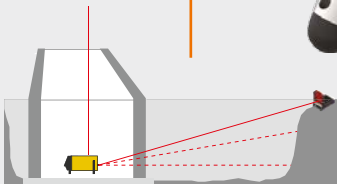
**LARGE AND EASY-TO-READ DISPLAY**

**REMOTE CONTROL**

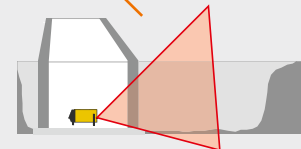
**PIVOT POINT AND 5/8" THREAD**



**ROBUST AND WATERPOOF**



**"S" SERIES AUTOTARGET SYSTEM AND VERTICAL LEVEL**



**-10 % TO +40 % INCLINATION ANGLE**

# GEOMAX MACHINE GUIDANCE

No more intuitive guesswork or costly and difficult-to-install-and-operate machine control systems. GeoMax has a new easy and accurate way to guide excavators.





EZDig



MR210

MR260R

TILT



# GeoMax EzDig Series

The new easy and accurate way to guide excavators

The new GeoMax EzDig S and T excavator guidance system offers the easiest calibration and equipment operation available on the market – and at an affordable price. The EzDig excavator guidance systems “work when you do!”

## BENEFITS

1. No more overcutting, costly fill materials and rework
2. Eliminate checking and installation machine downtime
3. No more time consuming tape measurements
4. Save fuel, time and material

### Technical data

	EzDig STANDARD	EzDig TOUCH
System power	12/28 V	
<b>Angle sensor</b>		
Battery charger	Solar	
Dimension and weight	70x100x20 mm; 282g	
Protection	IP67 Water and dust	
<b>Control unit</b>	Digital 2.6" (10cm)	Touch 7" (18cm)
Screen size and resolution	128x64 pixels	800x480 pixels
Optional 2D sensor	N/A	2D Gyro sensor
<b>Memory</b>		
Machines / Buckets number	5 / 10 per machine	over 100 / over 100
Accuracy	+/- 7/16" - 1cm	
Operating temperature	-20° to + 70° (-4° to 158° F)	

Calibration storage 100 machines / 10,000 buckets

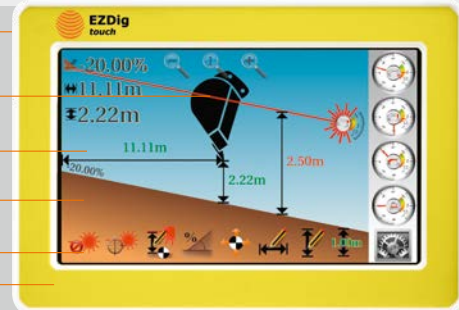
Intuitive graphic representation

7" colour and touch screen

Video integration for help and FAQs

Functions at your fingertips

Optional 2D sensor



TOUCH control unit

STANDARD control unit



5 machines / 150 buckets calibration storage

Rugged and compact design

One-function buttons for fast access to all functions

Easy-to-understand and functional icons

## LED display

Easy level indication

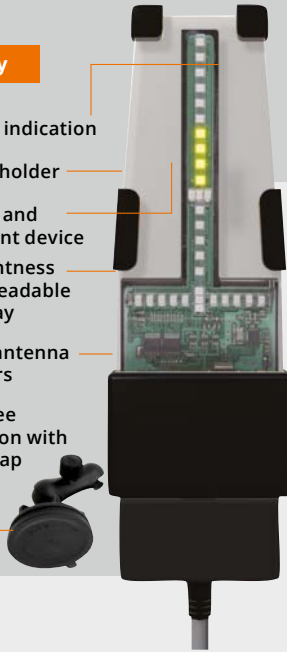
Magnetic holder

Heads-up and transparent device

High brightness sunlight readable LED display

Wireless antenna for sensors

Screw-free installation with suction cap



## Sensors

Sensor plates mounting via 3M extra strong adhesive tape, no welding necessary

Removal key

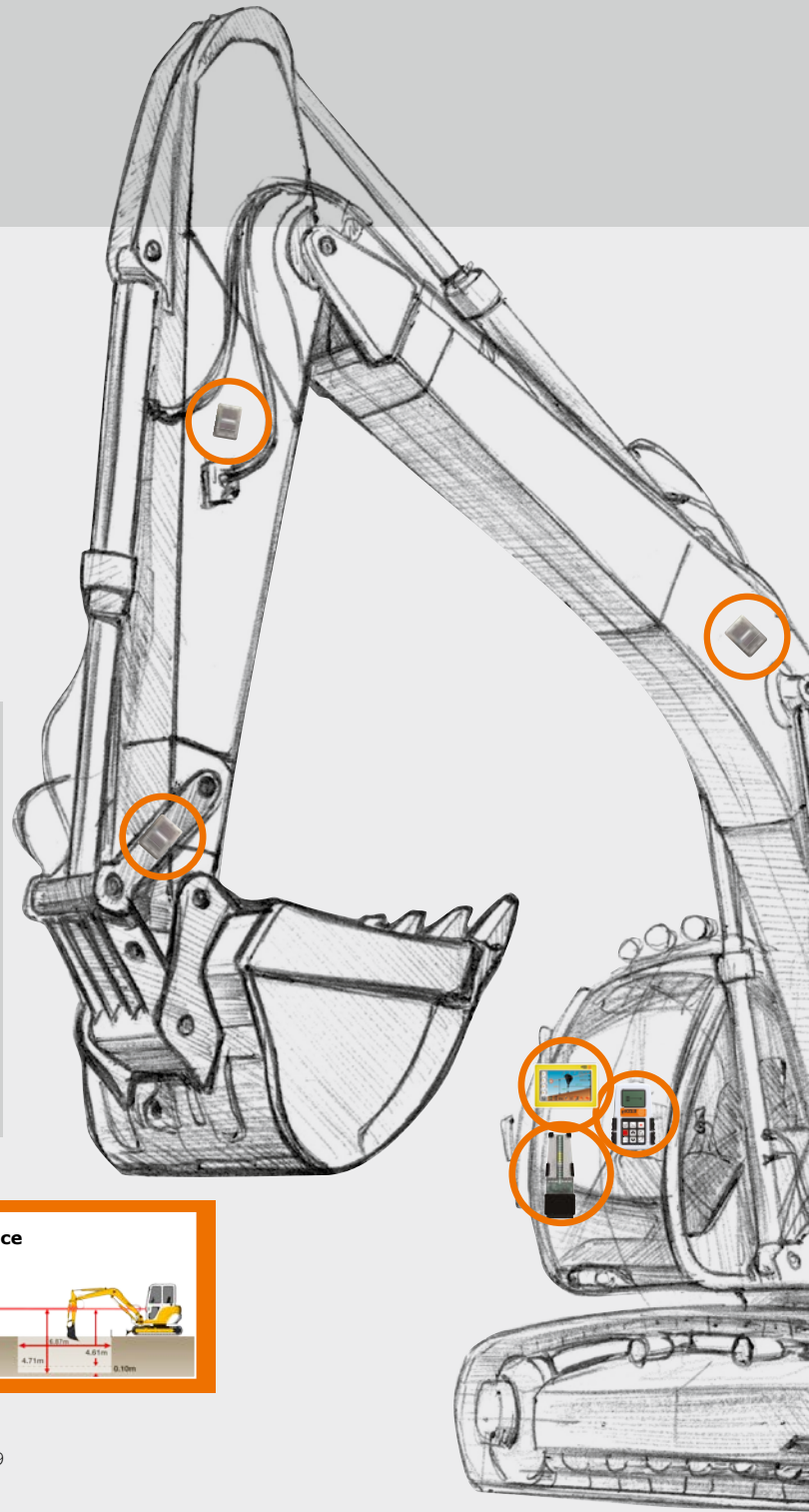
Laser catcher for optional reference to laser rotator

Self-calibrating high precision angle sensor

Solar powered and charged sensors with low cost holders to apply on multiple machines

Wireless communication to controller

2D Sensor for working 360° in field with single or double slope and no limits of straight line



## REAL-TIME INDICATION

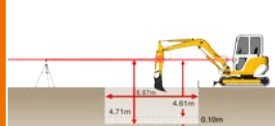
Depth



Slope



Distance



# GeoMax MR240

Ideal for use with backhoes and mini-excavators



Its LED indicators show the position of cutting edge in relation to laser reference beam. MR240 has 3 indicators in coarse mode, up to 5 in fine mode and is equipped with magnet mount with extra strong rare earth magnets.

- Accurate grade information for all visual machine control applications
- Extra strong rare earth magnets
- Rugged and waterproof design

## Technical data

Range	200 m
Accuracy	Fine 6 mm Coarse 30 mm
Reception angle	240°
Reception height	14 cm
Power	3 x AA batteries, 1,5 V
Battery life	130 h
IP protection	IP67
Weight w/o battery	2.2 kg
Size	220 x 120 x 100 mm



# GeoMax MR360R

Accurate grade information for all visual machine control applications

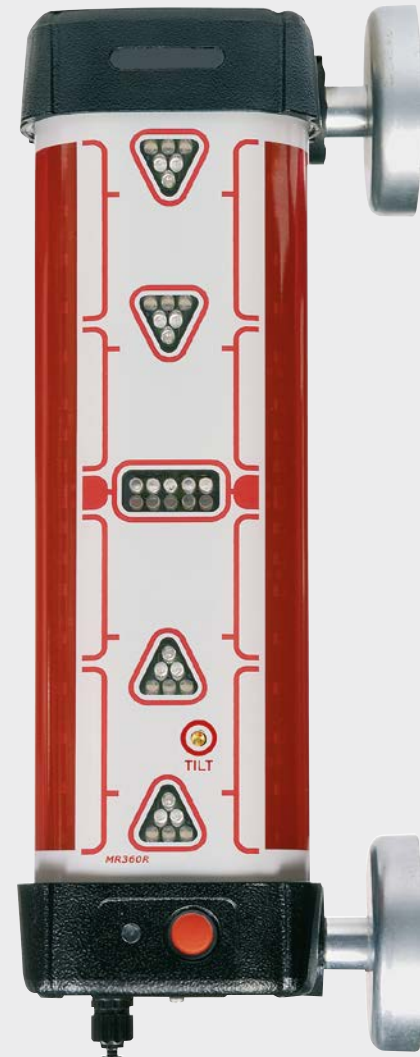
Large 360° detection windows pick up any rotating laser from any angle. MR360R incorporates a built-in vertical indicator that monitors angle of the stick, signalling if it is plumb or under/over extended. The remote display shows direction arrows for plumbing up the dipper stick.

Its receiver has plumb LED indicator and its magnet mount allows quick setup and easy movement from machine to machine. Clamp mount also available.

- 360° detection windows for total coverage
- In-cabin remote display for best control on operations
- No cables required

## Technical data

Range	200 m
Accuracy	Fine 6 mm Coarse 12 mm
Reception angle	360°
Reception height	25 cm
Power	NiMh rechargeable batteries
Battery life	130 h
IP protection	IP67
Weight w/o battery	1.8 kg
Size	375 x 75 x 107 mm



# GEOMAX CABLE LOCATING AND TRACING

Increase on-site safety, minimise human error and save time and money.







GE MAX

**EZiCAT™**  
Cable Avoidance Tool  
**i500**

GE MAX

**EZiCAT™**  
Cable Avoidance Tool  
**i550**

GE MAX

**EZiCAT™**  
Cable Avoidance Tool  
**i650**

GE MAX

**EZiCAT™**  
Cable Avoidance Tool  
**i750**

GE MAX

**EZiCAT™**  
Cable Avoidance Tool  
**i550<sup>XF</sup>**

GE MAX

**EZiCAT™**  
Cable Avoidance Tool  
**i750<sup>XF</sup>**

ULTRA

ULTRA

GE MAX  
**EZiTEX™**  
i3000



# GeoMax EziSystem

Increase on-site safety, minimise human error and save time and money

Every year site workers are injured and equipment damaged due to accidentally striking buried cables and pipes. As the complexity of large underground networks continually increases, knowing the location of buried cables and pipes prior to excavation work has never been so important.



## EziSystem i-Series

### Easily avoid buried cables and pipes before excavation work

The EZiSYSTEM cable avoidance equipment makes locating buried cables and pipes easy and efficient. With an EZiCAT i-Series locator there is no need to manually adjust the sensitivity, with the unique Automatic Pinpointing feature users can simply press the trigger and start locating.

## EziSystem xf-Series

### Easily locate and trace buried utilities over greater distances

The EZiSYSTEM xf-Series utility locating and tracing equipment makes locating buried utilities easy and efficient. The xf-Series locators have additional low frequencies enabling you to locate and trace utilities over longer distances and in congested environments. With an EZiCAT locator there is no need to manually adjust the sensitivity, with the unique Automatic Pinpointing feature users can simply press the trigger and start locating.



### LOGICAT Software

#### Upload stored records to view locators use

LOGICAT Software enables you to easily extract and upload stored data from your EZiCAT data logging and GPS cable locators, then analyse and report on the following traceable data.

#### The benefits of data logging in 5 steps

1. Conduct ground survey gathering data
2. Send logged data to Bluetooth® enabled PC
3. View EZiCAT usage statistics and charts
4. Make informed decisions to efficiently manage EZiCAT fleet and operators
5. Implement changes to procedures for better results



# GeoMax Ultra System

Easily locate cables and pipes with pinpoint accuracy

## ULTRA System locators

Multi-frequency precision locators for locating and tracing buried cables and pipes.

They offer advanced operating capability with over 70 operating modes. Enabling the operator to optimise the settings, controls and operating modes to maximise the locators performance in the most challenging and complex site conditions.

The locator has a clear graphical LCD screen, with auto-pinpointing directional arrows. The screen is large and clearly laid out. It is daylight visible and backlit ensuring confident and fast locating in all operating conditions day or night.

The ULTRA Advanced Locator sets itself apart by intelligently monitoring other frequencies that are interfering with the signal you're locating or tracing and recommends which frequency to use for the best results. Saving you time and giving you increased confidence in your results.

- Remote controlled transmitter
- Signal interference monitor
- Signal direction enabled
- 22 configurable frequencies
- Modes:
  - Power (default)
  - Radio
  - Transmitter
  - Sonde

## The ULTRA System Transmitters

The transmitters are ideally suited for complex and challenging sites conditions. They are lightweight and have 12 configurable frequencies that perform well tracing over long distances and also for high impedance cables.

The 12 Watt advanced transmitter is remote controlled, which enables the user to quickly and simply adjust the tracing frequency to adapt to the most challenging and complex site conditions.

- Remote controlled transmitter
- Signal direction enabled
- 12 configurable frequencies
- Modes:
  - Connection
  - Induction
  - Clamp





### Technical data

Frequency / Mode	Power 50Hz, 100Hz and 450Hz; Radio 15kHz to 60kHz; Transmitter 512Hz, 314Hz, 8192Hz, 32768Hz, 83.1kHz and 200Hz; Sonde Preset 512Hz, 640Hz, 8192Hz, 33768Hz and 83.1kHz (22 frequencies user configurable)
Antenna configuration	Single peak, twin peak, null, total signal or left/right (cable only)
Depth	Power to 3m; Radio to 2m; Transmitter to 4.6m; Sonde to 6m
Depth estimation	5% of depth in line or sonde (0.2m to 4.6m depth range) 10% of depth Sonde 4.6m to 6m
Protection	IP65
Bluetooth®	Enabled
Shutdown	Selectable auto shutdown after 5, 10, 20 or 30 minutes
Operating temperature range	-20° C to 50° C
Batteries	2 x D alkaline (IEC LR20) not supplied
Battery life	60 h intermittent use (at 20°C)
Weight & dimensions	2.18 kg - 700mm (H) x 325mm (D) x 122mm (W)

### Technical data

Frequency / Mode	512 Hz, 3140 Hz, 8192 Hz, 32768 Hz, 83.1 kHz, 200 kHz (12 frequencies user configurable)
Protection	IP65
Direct connection (Max)	12 Watt (model specific) when connected to a buried service with impedance of 100 Ohms
Batteries	10 x D alkaline (IEC LR20) not supplied
Battery life	Up to 100 h intermittent use (level 2 output at 20°C)
Shutdown	Selectable auto shutdown after 1, 2, 3, 4, 5, 6, 7 or 8 h
Operating temperature range	-20° C to 50° C
Weight & dimensions	3.5 kg - 255mm (H) x 190mm (D) x 305mm (W)

### ULTRA locators

### ULTRA Transmitters



# GeoMax Accessories

GeoMax accessories have been individually tested to provide you the best performance and reliability in all your dialy tasks. Of a quality that meets the highest demands, you can be assured that the complete range of GeoMax accessories “work when you do!”. This is a selection of our current accessories portfolio, ask for additional options to your GeoMax representative.



## ZTW100

Wooden tripod with shoulder strap and side clamp screws, 104 cm packaged length, extendible to 166 cm, weight 5.7 kg.



## ZTA100

Aluminium light weight tripod with shoulder strap and side clamp screws, 105 cm packaged length, extendible to 167 cm, weight 4.5 kg.



## ZST101

Tripod-star, for setting up of tripods on hard and slippery surfaces.



## ZCA100

Tribrach carrier for GNSS antennas.



## ZCA101

Tribrach carrier with stub for prisms.



### ZPC105

Telescopic snap lock aluminium pole with 1/4" thread connector and screwable pin adapter. Snap lock at 1.5 and 2 m.



### ZPC200

Telescopic carbon fibre and aluminium pole for GNSS. Extends to 230 cm.



### ZPC201

Telescopic carbon fibre and aluminium pole for TPS. Extends to 230 cm.



### ZPC202

GNSS pole, 25 cm, for mounting Zenith receiver on carrier as extension for base setups.



### ZST100

Telescopic, dual-strut pole support. Suitable for all GeoMax poles and level staffs.



### ZPT4

Mini TPS pole, four screwable segments to 30 cm with a pin.

## TOTAL STATION, CONTROLLER & DIGITAL LEVEL CABLES

Zipp10 Pro/Zipp20	USB	Cable mini-USB to USB host connecting to a PC/tablet	ZDC301
Zoom20/30/35 Pro	RS232	Cable Hirose-RS232 connecting to a PC/tablet using serial transfer technology	ZDC100
	USB	Cable Lemo-USB connecting to a PC/tablet using USB transfer technology	ZDC217
ZDL700	RS232	Cable Hirose-RS232 connecting to a PC/tablet	ZDC100
	USB	Cable Lemo-USB connecting to a PC/tablet	ZDC102

## GNSS CABLES

Zenith15/25 Pro	RS232	Cable Lemo-RS232 connecting to a PC/tablet	ZDC227
	USB	Cable Lemo-USB connecting to a PC/tablet	ZDC226
	Satel EASyPro/battery	Y-Cable Lemo to Lemo and clamps connecting with Satel EASyPro radio and external battery for power supply	ZDC225
Zenith35 Pro	USB/RS232	Y-Cable Lemo to USB and RS232 for Zenith35	ZDC509
	Satel EASyPro/battery	Y-Cable Lemo to Lemo and clamps connecting with Satel EASyPro radio and external battery for power supply.	ZDC221



# GeoMax Accessories



## ZRP1

360° prism with soft bag.



## GRZ122

360° prism with 5/8" for GNSS antenna.



## ZMP100

Mini prism 0-constant with tip, fits to ZPC105 pole.



## ZPR100 and ZTP100

Circular prism with red holder, 0-offset. The ZTP100 target plate for precise aiming over long distances is separately available.



**ZTR101** Standard tribrach without optical plummet.

**ZTR103** Standard tribrach with optical plummet.

**ZTR201** Advanced tribrach without optical plummet.

## ZSA504

Four-section telescopic staff. Provides dual measuring faces with bar code and millimetre graduations.

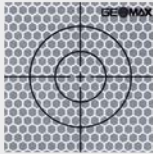
## ZSF301

Dual face high accuracy fibreglass levelling staff, 3 m, 1 section, barcode/E-Scale cm-graduation, with circular bubble and handle.

## ZSE504

Level staff 5 m, 4 sections, front side with E-graduation and back side with mm-graduation.





### ZTM100

Self-adhesive reflective target  
6 x 6 cm. For measurement of  
surfaces with standard EDM.



### ZDE100/GFZ4

Diagonal eyepiece.



### ZCA102

Reflector carrier with tubular  
level and optical plummet, for  
precise positioning.



### BATTERIES

High output Li-Ion batteries.

ZBA301 for Zipp10 Pro/Zipp20 Total Stations, 4.4 Ah

ZBA201 for Zoom Total Stations and Zenith15/25 Pro GNSS, 2.6 Ah

ZBA400 for Zoom Total Stations, 4.4 Ah

ZBA601 for Zenith35 Pro GNSS, 3.4 Ah

ZBA700 for Zenius5, 3.4 Ah

### CHARGERS

ZCH201 Charger for ZBA201/400

ZCH301 Charger for ZBA301

ZCH601 Charger for ZBA601

ZCH700 Dual charger for ZBA700



### ZMC100

The 4 GB USB memory  
stick is suitable for GeoMax  
instruments, providing the  
highest data dependability.

# GeoMax Accessories

## LASER RECEIVERS

The new GeoMax Zone Series come with three brand-new laser receivers that will complement and boost your performance.



	ZRB35 Basic	ZRP105 Pro	ZRD105 Digital	ZRD105B
Working diameter		900 m (3000 ft)		
Extended detection window	35 mm / 1.5 in	105 mm / 4 in	105 mm / 4 in	105 mm / 4 in
Numeric readout height	-	-	90 mm / 3.5 in	90 mm / 3.5 in
Beam catching	-	-	-	✓
Beam lock	-	-	-	✓
<b>Detection accuracies</b>				
Ultra fine	-	-	± 0.5 mm / ± 0.02 in	± 0.5 mm / ± 0.02 in
Super fine	± 1.0 mm / ± 0.04 in	± 1.0 mm / ± 0.04 in	± 1.0 mm / ± 0.04 in	± 1.0 mm / ± 0.04 in
Fine	-	± 2.0 mm / ± 0.08 in	± 2.0 mm / ± 0.08 in	± 2.0 mm / ± 0.08 in
Medium	± 3.0 mm / ± 0.12 in	± 3.0 mm / ± 0.12 in	± 3.0 mm / ± 0.12 in	± 3.0 mm / ± 0.12 in
Coarse	-	-	± 5.0 mm / ± 0.20 in	± 5.0 mm / ± 0.20 in



**ZCB100**  
Backstrap for hard shell containers.



**ZCT102**  
Hard shell container for 2 circular prisms, 2 carriers and 2 tribrachs.



**MW12**  
Easy-to-use and light road measuring wheel with handle activated wheel brake.



**SmartRod**  
Extend the 4 m telescopic SmartRod to easily capture the laser beam within the 165 mm beam detection window and receive height measurements on the digital display. No misreading and a new dimension of range.



# GeoMax Quality Management



## BUILT FOR ALL ENVIRONMENTS

With the design criteria “works when you do” GeoMax products are built to withstand all environmental conditions. GeoMax equipment is built with the intention to withstand all conditions you run into during your daily work. Rain, hail, snow or intense heat will never affect your GeoMax equipment - you can always keep working to get the job done.

Distance meter (Reflector mode): Laser class 1 in accordance with IEC 60825-1 resp. EN 60825-1  
Laser plummet: Laser class 2 in accordance with IEC 60825-1 resp. EN 60825-1  
Distance meter (Reflectorless mode accXess™): Laser class 3R in accordance with IEC 60825-1 resp. EN 60825-1

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## OUR COMMITMENT TO SAFETY AND THE ENVIRONMENT

All GeoMax products are fully CE (Conformité Européenne) as well as RoHS (Restriction of the use of certain hazardous substances in electrical and electronic equipment) and WEEE (Waste from Electrical and Electronic Equipment) conformant.

## OUR COMMITMENT TO QUALITY

The internationally active Swiss Association for Quality and Management Systems SQS, as well as the International Certification Network IQNET certified that GeoMax AG meets the requirements of ISO9001, Quality Management System and ISO14001, Environmental Management System.

- **Certified area:** Whole company.
- **Field of activity:** Development, manufacture, distribute, support and service of products, precision tools and systems for geomatic, industrial and construction applications.

# GeoMax Selection of our portfolio:



Zoom90 Series



Zoom35 Pro Series



Zoom30 Pro Series



Zoom20 Pro Series



Zoom20 accXess



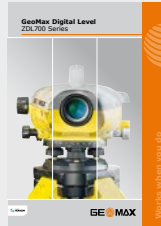
Zipp20 Open  
WinCE® Series



Zenith35 Pro  
Series



Zenith15 & 25 Pro  
Series



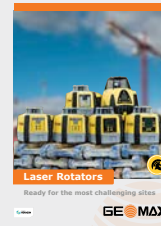
ZDL700 Series



Zoom300



Zoom3D Series



Zone Series



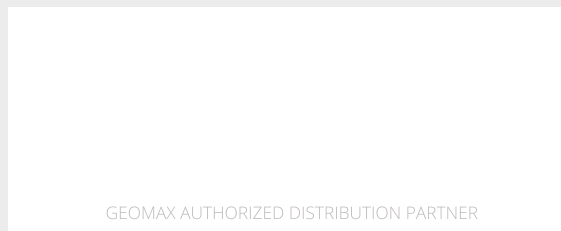
Zeta125 Series



EzDig



Ezi & Ultra Systems



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