

### Works when you do

# **GeoMax General Catalogue**





Scan to **GeoMax website** 

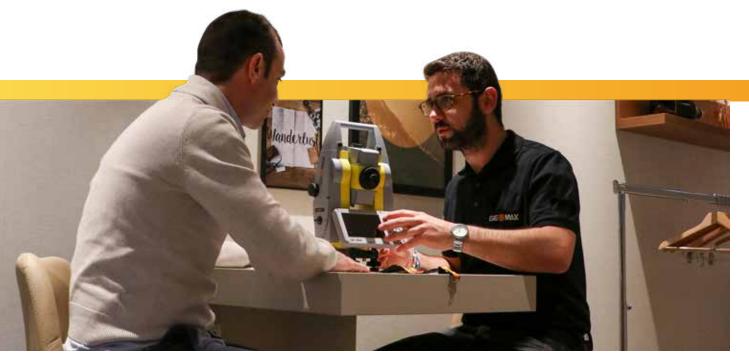


geomax-positioning.com

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## This is GeoMax

Serving the world with a local approach



GeoMax, part of Hexagon, has gained the confidence of its partners and has built up a strong network of resellers worldwide. The confidence was won over by our knowledge of user needs in their everyday environment, the quality and performance of our products, an extensive service offering, tailor-made technical training and a proximity-oriented business approach.

Our success also comes from our visionary approach to software and data management. While most major players were offering solutions on Windows CE, GeoMax introduced the world's first Android $^{\text{TM}}$ -enabled software: X-PAD. This software provides flexibility to everyone to digitise their work tasks. It is available in many versions for daily use in the field (X-PAD Ultimate) or in the office and technical workshops (X-PAD Office Fusion, CalMaster).

### We provide innovative measurement equipment

At GeoMax, we concentrate on providing you with the quality and functionality you need in your daily work. Removing the frills enables us to deliver products that "work when you do" – independent of weather, location and task.

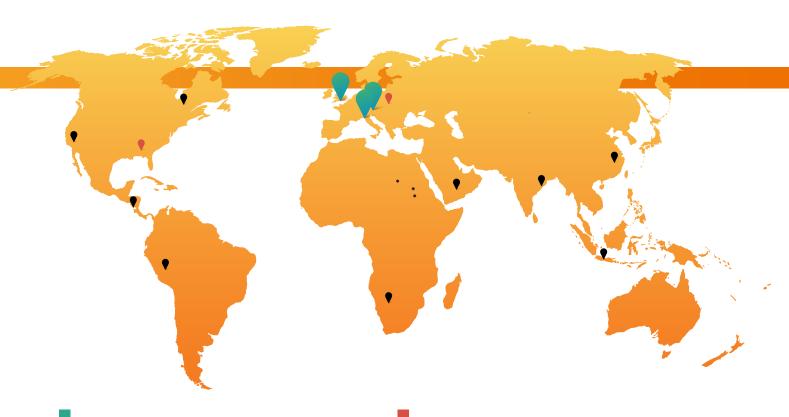
GeoMax offers unmatched user-friendly solutions and extensive hands-on support for surveying and construction professionals across the globe.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 22,000 employees in 50 countries and net sales of approximately 4.3bn EUR.

### **Mission**

In this digital and standardised world, GeoMax puts data to work, by offering its customers tailor-made services and connected ecosystems, so they can flexibly use autonomous workflows while boosting efficiency and business growth. We collaborate, listen to our partners, understand the markets and answer to the local needs of our customers to make their daily work easier.

### Works when you do



### 3 Strategic partners

### 2 Operational centres

### 270 Dealers

Our 270 specialist dealers will work with you to provide the right surveying and construction solutions to best suit your needs, help you work efficiently and to support you with a dedicated service and training team.





- We were looking for a new, precise, cutting-edge tool for an important tracking contract. After a search among the competitors, we conducted a test at a GeoMax Dealer, and the choice was straightforward!
  - Samuele and Giacomo Sacchi, from Studio Sacchi



- I purchased my first piece of GeoMax equipment about 10 years ago. I actually own all GeoMax equipment now and I am extremely happy with it thus far.
  - Matt Filus, Certified Floodplain Manager at the Excelsior Group



- GeoMax's ecosystem makes our work in the field much easier.
  With the hardware and software solutions, we gain versatility in projects, agility in decision-making, real-time, and in the palm of our hands. Undoubtedly the best choice!
  - **Geotopsul**, Surveying Company

# **Services & Support**

Experienced, dedicated, multilingual



We'll be there when problems arise so your work can continue as planned with minimal downtime. And with product training sessions, online resources and more, we're also there to help advance your knowledge and skills so you can succeed as a GeoMax partner.

Our customers are located across the globe and so is our support. The experienced, dedicated, and multilingual teams at our worldwide maintenance and service centres provide fast response times and work with you until your problem is solved.

Additionally, our Total Care Shield Warranty covers repairs and maintenance, recalibration, cleaning and servicing, software updates and functional and safety testing. You can be confident both in the quality of your GeoMax product and the expert service you'll get to keep your products working properly.

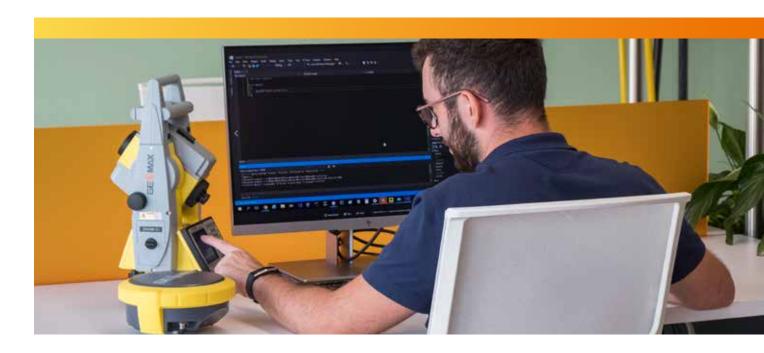
GeoMax doesn't want anything to stand between our customers and training opportunities, which is why we've developed and will continue to release on-demand Expert Webinars published on our website and available to watch anytime, from anywhere.



Our vision of support is direct and personalised. The GeoMax Academy offers global and local trainings with customised programs for our partners and customers. We share our expertise and listen to feedback so we can continue developing products that meet customer needs and improve the competitive advantages of our instruments and solutions.

# **Quality Management**

Quality and performance are highest priority



At GeoMax, our highest priority is the quality and performance of our solutions to ensure your equipment works when you do at all times. Our products are designed and produced to withstand extreme environmental conditions – no failure or poor functioning in intense heat, snow, hail or rain.

Our commitment to quality is internationally recognised and certified with the same high Swiss quality standards as our parent company, Hexagon. GeoMax AG is ISO9001 Quality Management System and ISO14001 Environmental Management System certified by the Swiss Association for Quality and Management Systems SQS and the International Certification Network IQNET.

We also extend this quality commitment to safety and sustainability. GeoMax solutions are fully compliant with Conformité Européenne (CE), the Restriction of Hazardous Substance Directive (RoHS) and Waste from Electrical and Electronic Equipment (WEEE) regulations.









# **GeoMax Favourites**

### Customer satisfaction drives us

#### X-PAD Ultimate





I was in the field today for the first time in a while. Used X-PAD to do a topographic survey. It went flawless. The stop and go feature is something not found in any other product and is worth changing for that alone.

Christian Medders, Medders Surveying

Zoom95





I am entirely satisfied with the Zoom95 because the overall performance is excellent. The optics are outstanding; the operation is simple, easy to understand, and brilliant in combination with X-PAD Ultimate. I wouldn't do anything without it again.

Maximilian Hohl, Surveyor at Aurich & Hallbauer

#### Zenith60





When they built the survey standard cover off centre to the mark and you can't level the pole, but you remember your GNSS rover has an IMU in it!

Josh Godwin, Cadastral Surveyor

#### Zeta125





The Zeta125 is small, user-friendly and if I were an entrepreneur, I would buy this pipe laser before any other!

**Heinz-Günter Weigt,** owner of H.G. WEIGT VERMESSUNGSTECHNIK GmbH, Authorised GeoMax Dealer / construction expert with 40 years

#### **Zone Series**





My favourite feature of the Zone60 DG Laser Rotator is the two-axis grade setting option. Not having to calculate the grades myself makes work a lot faster and more accurate.

Rolf Dürr, Landscape gardener

# **Content**

### Explore our many solutions

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# **GeoMax Software**

GeoMax software solutions cover a wide range of professional surveying and construction applications. They are aligned with the workflows on sites to meet local needs and guide you through your tasks quickly and intuitively.



## **Works when you do**



# **X-PAD Ultimate**

### The Ultimate solution in the field



Our fully-featured X-PAD field software, X-PAD Ultimate, is the world's first Android field data collection software. It's available in two tailored versions: one for surveyors and one for construction professionals. The software is pleasantly simple to use, designed with the latest technology and always maintained without extra costs.

Optimised for field controllers and other mobile devices, X-PAD Ultimate includes a CAD function to prepare and adjust your data in the field. Additionally, you can load and display IFC files, hide and isolate elements and extract points, lines, surfaces and cross-sections for stakeout and checking operations. Equipped with the latest technology, like a 3D viewer, data integration in maps, a camera for augmented reality and voice command functions, you'll have the digital tools to make the most of your time in the field.

You can customise your software with a variety of modules that fit all types of projects and easily integrate your work into the X-PAD ecosystem of software solutions.

#### X-PERT Service and Protection

We listen to our customers and continually work to improve our software, keeping the perfect balance between a clear interface, straightforward workflows and high functionality. Then we provide those improvements to you through our X-PERT service software updates. Additionally, with SHIELD, you receive maintenance during warranty, license transfer and additional support at no cost.



- Provides all software releases during the purchased period automatically
- Delivered with the initial X-PAD Ultimate order
- Free of charge for the first year and can be renewed and purchased after license expires



- Covers software maintenance (bug fixing)
- Always comes with all X-PAD Ultimate products free of charge

# **X-PAD Office Fusion**

The all-in-one office software



X-PAD Fusion includes tools and applications specifically designed for construction and surveying professionals. You can integrate data from TPS, GNSS, scanners, levels, drones and other sensors in a single environment. Unlike other software solutions in the market, X-PAD Fusion simply and intuitively manages measurements, coordinates, drawings, point clouds and other types of data in one platform without additional software needed. Modify your data graphically based on a 3D CAD system and easily exchange data with X-PAD Ultimate thanks to X-PAD 365 integration.



### **GNSS** post-processing module

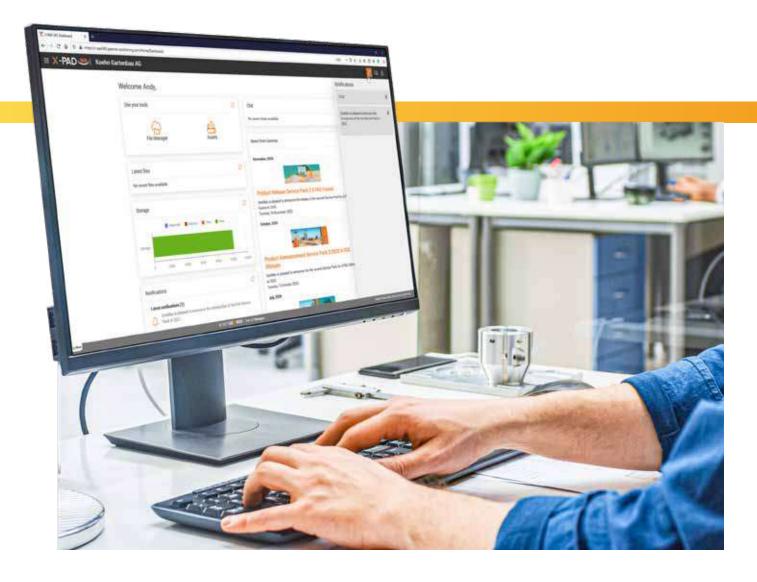
With the GNSS Post-Processing module, you can calculate GNSS static data. The simple workflow can be completed in three steps: import, set reference and rover observations, and run the calculation. The calculated data can be stored and used for all other topographic operations inside X-PAD Fusion. As an additional option, the Post-Processing Advance module allows processing GNSS baselines with a least square adjustment algorithm to ensure the highest accuracy results.

Scan to find out more on the X-PAD Office Fusion Product Page



## **X-PAD 365**

### One platform, endless services



X-PAD 365, the web-based GeoMax cloud platform, was created to address data management and collaboration challenges surveyors and construction professionals meet every day.

It lets you access, store and share data anytime, anywhere to stay connected 365 days a year.

Upgrade your teamwork with the Collaborative Survey and Stakeout feature that allows several users to work on the same surveying or stakeout project together, sharing real-time surveyed points and drawings in X-CHAT and immediately seeing their progress.

And with automatic and manual backup for X-PAD Ultimate, you will never lose your data.



# X-PAD 365 Packages

### Tailored packages to perfectly meet your needs

	BASIC	PROFESSIONAL	ENTERPRISE
<b>ASSET MANAGER</b> Register equipment, software and services.	X	X	X
NOTIFICATIONS Get informed about news on registered assets.	X	X	X
VIRTUAL TRAINING ACADEMY Access trainings material, webinars and support documentation.	*	X	X
FILE MANAGER Store, manage and exchange files.		**	**
BACKUP AND RESTORE  Manual and automatic backup for X-PAD Ultimate and X-PAD  Ultimate GO.		X	X
X-CHAT Exchange data and communicate between office and field.		X	X
COLLABORATIVE SURVEY Work on the same survey in real-time.		X	X
MULTIPLE USER MANAGEMENT One administrator can create up to five sub-users using common storage area.			X

<sup>\*</sup> Basic: Product documentation and information

\*\* Professional: 10 GB space / Enterprise: 100 GB space



All licenses are annual licenses that will be automatically renewed. Besides the options listed above, your X-PAD 365 can be enhanced with additional functionality, (e.g. additional sub-users, more storage capacity).

# Collaborate on survey and stakeout



Initiate a collaborative session through X-PAD 365 and save time by working together on a survey project. For example, capture and integrate data from multiple Zenith60 smart antennas into the Zenius800 field controller running X-PAD Ultimate software, allowing everyone to view measurement progress in real time. Once the data has been saved in 365, edit and add points to plans in the office with X-PAD Fusion. These new plans are immediately available to the site crew for stakeout. With these collaborative tools, crew members progress through sites quickly and efficiently, missed points or double measurements are eliminated and stakeouts become a seamless part of the process.

## \*X-PAD CalMaster

### Efficient calibration for all your lasers

Scan to find out more on the X-PAD CalMaster Product Page





Laser calibrations are rarely quick and easy. X-PAD CalMaster users can significantly reduce calibration time by using the system. It enables a highly accurate method to calibrate construction lasers and can be operated without extensive training.

The system runs on X-PAD software that is well-known in the market for its user-friendliness and intuitive interface. Holding its promise, X-PAD CalMaster guides users step-by-step through the measuring workflow and supports them with instructions for accurate and fast measurements.











	GEOMAX ZONE SERIES	GEOMAX PIPE LASERS	3RD PARTY LASERS	3RD PARTY PIPE LASERS	3RD PARTY LINE/POINT LASERS
Issue calibration report					
Check plane laser beam					
Check spot beam					
Check grade 0.5%		0			
Check grade 1.0%		0		0	
Check grade 1.5%					
Guided calibration		0			

# **Total Stations**

Whether with a team or working solo, boost your daily performance with these easy-to-use and highly productive total stations for a wide range of applications, such as surveying, engineering and construction.



# Works when you do



# **Zoom95 Series**

The perfect one-person total station



If you are in charge of surveying for construction projects or purchasing devices for your company, this one-person total station is made for you. The prism can be quickly located, tracked and stays locked with the built-in STReAM360 technology.

Combined with our X-PAD field software, which is open to 3rd-party field controllers and available in Windows and Android, Zoom95 provides a full range of efficient choices. The X-PAD software suite has been developed based on our customer feedback. It perfectly matches Zoom95 workflows. It is so easy to use that no extra training is needed.

This solution is not only economical, with no maintenance cost, but your data is digitalised, secure and easy to access.





# Digitise your construction workflow



# Make the move to digital on the construction site by combining GeoMax's hardware and software solutions.

Upload digital building plans into X-PAD Ultimate running on a Zenius800 field controller tablet for a fully integrated experience on site. X-PAD Ultimate Build has intuitive interfaces tailored to building construction, making it faster and easier to locate points from plans with your Zoom95 robotic total station. This digital solution also eliminates doubt – edits to digital plans are updated everywhere, so you can be certain the plans you see on site are current.

# **Zoom75 Series**

The right solution to digitise your site



The Zoom75 and X-PAD solution was developed to meet the demands of both novice and experienced surveyors. You have the choice to use two people and the onboard software, or a single surveyor with a field controller of choice or a phone. Both guarantee fast and convenient work with CAD data. The instrument's big screen, optional long-range Bluetooth handle and high performing processor add to the easy, intuitive workflow of X-PAD software. Available for both Android and Windows, X-PAD provides a familiar user experience, reducing the need for training.

User-friendliness and flexibility make it easy to start digitising your construction site.



# X-Pole

### When TPS meets GNSS



The full integration of X-Pole with X-PAD field software lets you toggle between both measurement modes. Decide with the press of one button if you want to change from TPS to GNSS mode. For example, easily switch to GNSS mode when some points cannot be measured with TPS due to limited prism visibility. Once those points are measured, change back to TPS mode. This enhances the efficiency of the system by eliminating the need for cumbersome and time-consuming station setups.





# Measure flexibly and efficiently



# Switch between TPS and GNSS measurement modes with the fully integrated X-Pole and X-PAD Ultimate field software.

When structures like piles interfere with the line of sight from your Zoom75 robotic total station to your prism, easily switch to GNSS mode with the push of a button in the field software's X-Pole module and complete the measurements with a Zenith60 smart antenna. Move flexibly and freely around the site, logging and viewing all data on your Zenius800 field controller. Once those points are measured, easily change back to TPS mode. This eliminates difficult and time-consuming station setups, enhancing your overall efficiency.

# **Zoom50 Series**

### When simplicity meets performance



With proven accXess EDM technology, the Zoom50 features an intelligent distance measurement engine designed for outstanding range, speed, and accuracy even under tough conditions. With the Polar option, the TPS can operate at a temperature as low as -30 °C.

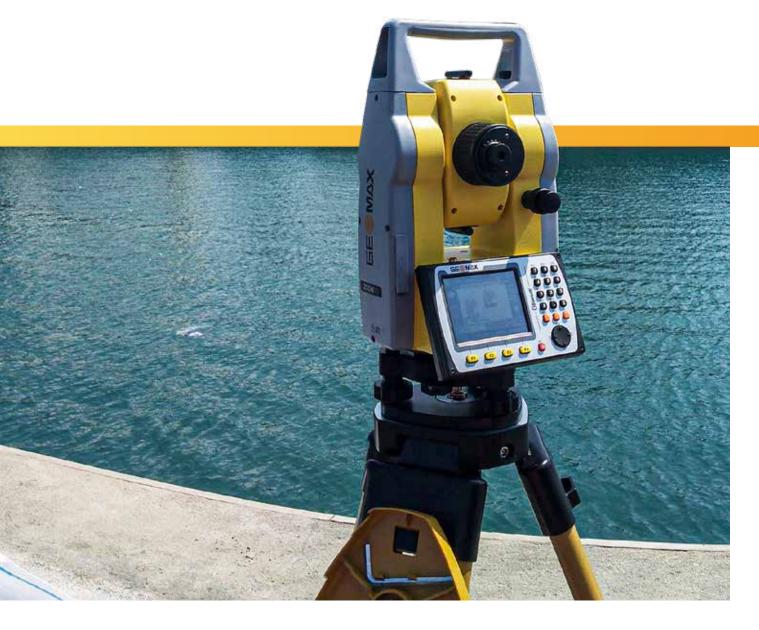
All this, in combination with the full VGA colour touch screen, built-in Bluetooth®, USB port, and full-featured application package, make the Zoom50 the most powerful device in the GeoMax manual total station family.





# **Zoom40 Series**

Stay flexible, stay accurate



When flexibility counts, the GeoMax Zoom40 Series is your choice. Choose the onboard software you prefer. With the intuitive X-PAD field version for Windows OS, you get the most out of your TPS. Benefit from further flexibility with the high-resolution, graphical, colour touch screen, allowing you to work in the way that best fits your needs.

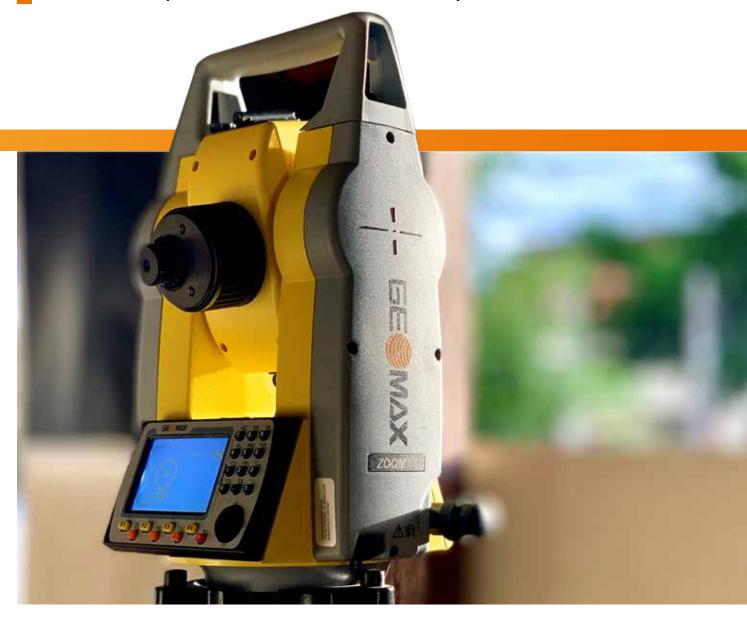
Combined with the ability to measure long distances with high accuracy, you can be sure the Zoom40 "works when you do".





# **Zoom25 Series**

When simple and reliable is what you want



Fast, simple and flexible data transfer is delivered by the built-in RS232, USB and Bluetooth®. With a reflectorless range of 500 metres, you are guaranteed high precision and reliability.

This manual TPS offers an intuitive user interface, graphical user guidance and an extended application package. Combined with an extra-long battery life, the Zoom25 makes it easier to deliver reliable data productively.



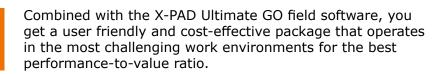


## Zoom10

### More convenience and smoother workflow



To make your job easier, intuitive onboard software runs on two built-in displays. It ensures quick and accurate reflectorless measurement up to a range of 350 m and angular accuracy of 2". In combination with X-PAD software, the Zoom10 seamlessly integrates with your workflow to combine and process data from every sensor into one platform.





Please note this package is only available in some countries.





# Zipp02

Digital theodolite for all your general construction tasks





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 and set zero for horizontal angle, a variation of measurement units, and 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 choice when it comes to checking angles, alignments, grade work and short-range levelling.

TECHNICAL DATA			
Precision	2"		
Magnification	30x		
Compensator system	Automatic vertical compensator		
Display	User set on/off		
Keypad	Double side large character back- lit LCD		
Keys	Numeric with 3 programmable function		
Operation period w/o laser plummet	6 one-touch button functions		
Live mode	36 h		

# **GeoMax TPS**

### **Manual Total Stations**

	Zoom10	Zoom25	Zoom40
ANGLE MEASUREM	ENTS		
Accuracy	2"	1", 2", 5"	2", 5"
Display resolution	1", 5", 10"	1"	1"
Method	Absolute encoding	Absolute, continuous, diametrical	Absolute, continuous, diametrical
Compensation	Dual axis	Quadruple axis	Quadruple axis
TELESCOPE			
Туре	-	neXus	neXus
Magnification	30x	30x	30x
NavLight™ Range	-	-	-
NavLight™ Accuracy	-	-	-
<b>DISTANCE MEASU</b>	REMENTS - PRISM		
Range	3000 m	3500 m (std. prism)	3500 m (std. prism)
Accuracy	3 mm + 2 ppm	2 mm + 2 ppm	2 mm + 2 ppm
Typ. time (fast/standard)	1 / 1.5 sec	2 / 2.4 sec	2 / 2.4 sec
<b>DISTANCE MEASU</b>	REMENTS - NON-PRISM**		
Range	350 m	500 m	500 m
Accuracy	3 mm + 2 ppm	2 mm + 2 ppm	2 mm + 2 ppm
Footprint	8 x 20 mm @ 50 m	8 x 20 mm @ 50 m	12 x 24 mm @ 50 m
INTERFACE			
Keyboard	Two full alphanumeric	Two full alphanumeric***	Two full alphanumeric***
Display	B&W, high res., $160 \times 96$ pixels with backlight, $6$ lines	B&W, high res., $280 \times 160$ pixel, backlit, 8 lines, heatable	Colour & Touch, 3.5" Q-VGA 320 x 240 pixel with LED backlight, 10 lines
Data recording	Internal memory, 20,000 points	Internal memory, 50,000 points	Internal memory, 2 GB
Bluetooth	Yes	Yes	Yes
Removable memory	SD card	USB stick	USB stick
Ports	Serial, USB mini	Serial, USB and external power	USB, USB mini
SOFTWARE			
Operating System	Embedded CE	Embedded CE	Open Windows CE
Open for 3rd party SW	Open to X-PAD Ultimate GO	-	Yes
Basic package	-	Yes	Fully flexible****
Advanced package	-	COGO, Ref. Arc, PIN/PUK	Fully flexible****
PHYSICAL SPECIF	CATIONS		
Weight	Approx. 5.5 kg with battery & tribrach	4.2 -4.5 kg w/o battery and tribrach	5.3 kg w/o battery & tribrach
Operating temperature	-20 °C to 50 °C	-20 °C to 50 °C (optional Polar Version -30 °C to 50 °C)	-20 °C to 50 °C
Protection class	IP54	IP55	IP54
POWER SUPPLY			
Type/Operating time****	Removable, 10 hours	Removable, 16 hours	Removable, 10 hours
PLUMMET			
Туре	Laser point, adjustable brightness	Laser point, adjustable brightness	Laser point, adjustable brightness

<sup>\*</sup> Long mode
\*\* Optimal conditions to Kodak Grey Card (90% reflectivity)
\*\*\* Optimal
\*\*\*\* Optimal
\*\*\*\* Single measurement every 30 seconds, at 25 °C. Battery time maybe shorter, depending on conditions
\*\*\*\*\* X-PAD, FieldGenius, Carlson SurvCE

# Works when you do

### **Robotic Total Stations**

Zoom50	Zoom75	Zoom95
1", 2", 5"	1", 2", 3", 5"	1", 2", 3", 5"
1"	0.1"	0.1"
Absolute, continuous, diametrical	Absolute, continuous, diametrical	Absolute, continuous, diametrical
Quadruple axis	Quadruple axis	Quadruple axis
accXXess	accXXess	accXXess
30x	30x	30x
-	5 m - 150 m	5 m - 150 m
-	5 cm at 100 m	5 cm at 100 m
3500 m (std. prism) / 10,000 m*	3500 m (std. prism) / 10,000 m*	3500 m (std. prism) / 10,000 m*
2 mm + 2 ppm	1 mm + 1.5 ppm	1 mm + 1.5 ppm
1 / 2.4 sec	0.8 / 2.4 sec	0.8 / 2.4 sec
500 m / 1000 m	500 m / 1000 m	500 m / 1000 m
2 mm + 2 ppm (< 500 m), 4 mm + 2 ppm (> 500 m)	2 mm + 2 ppm (< 500 m), 4 mm + 2 ppm (> 500 m)	2 mm + 2 ppm (< 500 m), 4 mm + 2 ppm (> 500 m)
8 x 20 mm @ 50 m	8 x 20 mm @ 50 m	8 x 20 mm @ 50 m
Two full alphanumeric***	Two full alphanumeric***	Two full alphanumeric***
Colour & Touch, 3.5" Q-VGA 320 x 240 pixe with LED backlight, 10 lines	Colour & Touch, 5" WVGA 800 x 480 pixel with LED backlight	Colour & Touch, 5" WVGA 800 x 480 pixel with LED backlight
Internal memory, 50,000 points	Internal memory, 2 GB	Internal memory, 2 GB
Yes	Internal & long-range Bluetooth handle	Internal & long-range Bluetooth handle
USB stick	SD card / USB stick	SD card / USB stick
Serial, USB and external power	Serial, USB, USB mini, external power, WLAN	Serial, USB, USB mini, external power, WLAN
Embedded CE	Open Windows CE	Open Windows CE
-	Yes	Yes
Yes	Fully flexible****	Fully flexible****
COGO, Ref. Arc, Road 3D, Traverse, PIN/PUK	Fully flexible****	Fully flexible****
4.2 - 4.5 kg w/o battery and tribrach	5.0 - 5.3 kg w/o battery and tribrach	5.0 - 5.3 kg w/o battery and tribrach
-20 °C to 50 °C (optional Polar Version -30 °C to 50 °C)	-20 °C to 50 °C	-20 °C to 50 °C
IP55	IP55	IP55
Removable, 16 hours	Removable, up to 8 hours	Removable, up to 8 hours
Laser point, adjustable brightness	Laser point, adjustable brightness	Laser point, adjustable brightness
MOTORISATION		
Scout -360° Prism Search: Range	-	300 m at round prism
AiM - Prism fine aiming: Range / Accuracy	1000 m at round prism / 1"	1000 m at round prism / 1"
TRack -Prism following		
Range	800 m at round prism	800 m at round prism
Max. speed	90 km/h at 100 m	90 km/h at 100 m
riax. speed	30 KIII/II dt 100 III	30 KIII/II at 100 III

# **GNSS Receivers**

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 to increase your productivity and take your performance to the next level.



# Works when you do



# **Zenith60 Series**

Newest technology for highest productivity



Thanks to the built-in IMU technology you can accurately measure inaccessible points with the antenna tilted, speeding up your work. You no longer need to spend time levelling the pole. The Zenith60 is calibration-free.

The instrument's resistance to electromagnetic fields gives you confidence that you can rely on your data.

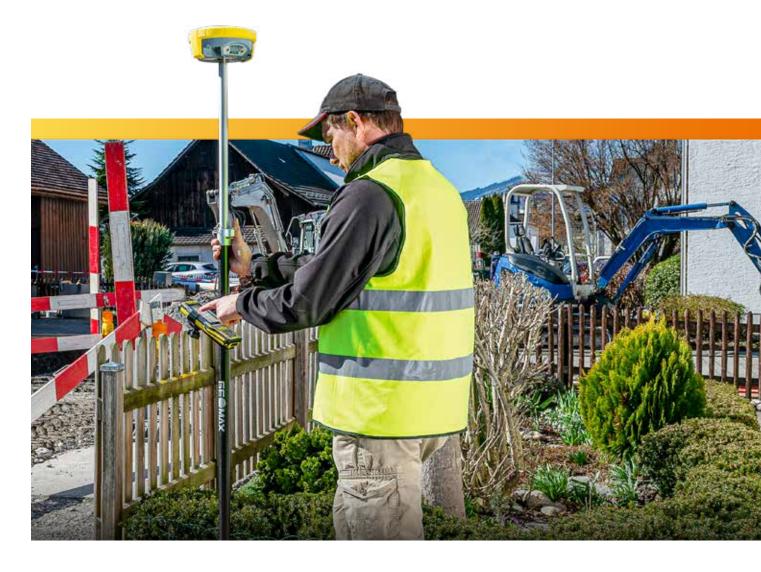
With countries no longer supporting 2G and 3G, the 4G LTE module onboard the Zenith60 gives you the certainty of receiving your RTK data now and into the future. The built-in SATEL TR4+ is an exceptional UHF radio, supporting the most established protocols on the market. With the measurement engine from our trusted partner NovAtel and other Hexagon technologies, Zenith60 is an antenna you can trust to do the job right.

You have the flexibility to customise the Zenith60 to your needs, as it is available in four different versions. Decide for yourself if you need an antenna, with or without tilt capability and the UHF module.

Scan to find out more on the Zenith60 Series Product Page

# **Zenith16 Series**

Gets the job done at an affordable price



In combination with GeoMax field controllers and X-PAD software, this receiver unlocks its full potential.

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 and NovAtel.

GeoMax aims to empower customers with a choice of which 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.





# **Zenith06 Series**

Simple and efficient, everything you need



Do you need accurate results without spending a lot of money on expensive and complex equipment? GeoMax has a solution: the Zenith06 smart antenna with X-PAD field software.

This simple rover and intuitive field software eliminate the need for extensive training to produce reliable outcomes. The software has an intuitive workflow, developed with input from customers, which allows for quick familiarisation. The maintenance for X-PAD field software comes at no extra cost.

With its compact, lightweight design, the Zenith06 is easy to carry in the field and gentler on your body.





# Calculate volume and make plans for on-site materials



Integrate the Zenith16 antenna with X-PAD software for topographic surveys when you need to calculate the volume of onsite materials, like dirt piles, and plan for their relocation.

The Zenith16 provides measurement data for accurate calculations and clear visualisations with X-PAD Ultimate software running on the Zenius800 field controller. Import into X-PAD Fusion to create detailed 3D drawings, keep up-to-date records and effectively plan material handling and relocations.

# Comparison Chart

		Zenith06	Zenith16	Zenith60
RECEIVER SPECIFICATIONS				
Signal tracking		Dual-frequency	Dual-frequency	Multi-frequency
GPS / GLONASS / Galileo / BeiDou / QZSS / N	NAVIC / SBAS	0/0/0/0/0/0/0	0/0/0/0/0/0/0	0/0/0/0/0/0/0
L-band: Terrastar-C Pro correction service	(PPP)	0		[] (opt.)
Tilt compensation		0		
Reliability		99.9%	99.99%	99.99%
Maximum positioning update rate		10 Hz	5 Hz	5 Hz, 20 Hz (opt)
Initialisation time		typ. 8s	typ. 4s	typ. 4s
QR-iConnect				
X-Pole support				
RTK reference station functionality				
ACCURACY (RMS)*				
Single baseline RTK	Horizontal: Vertical:	20 mm + 1 ppm 30 mm + 1 ppm	10 mm + 1 ppm 20 mm + 1 ppm	8 mm + 1 ppm 15 mm + 1 ppm
Network RTK	Horizontal: Vertical:	20 mm + 1 ppm 30 mm + 1 ppm	10 mm + 0.5 ppm 20 mm + 0.5 ppm	8 mm + 0.5 ppm 15 mm + 0.5 ppm
Static (phase) with long observations	Horizontal: Vertical:		3 mm + 0.1 ppm 3.5 mm + 0.4 ppm	3 mm + 0.1 ppm 3.5 mm + 0.4 ppm
Static and rapid static (phase)	Horizontal: Vertical:		5 mm + 0.5 ppm 10 mm + 0.5 ppm	3 mm + 0.5 ppm 5 mm + 0.5 ppm
Tilt compensated real-time kinematic		0	0	Additional Hz uncertainty 2 cm up to 30° tilt
COMMUNICATION				
Power, Bluetooth®, USB, RS232, WLAN		0/0/0/0/0	0/0/0/0/0	0/0/0/0/0
Cellular modem		Controller internal	Controller internal	4G
UHF radio		-	Optional	Optional
Raw data logging / RINEX data logging / N	IMEA out	0/0/0	0/0/0	0/0/0
Data recording		Removable microSD card	Removable microSD card	Removable microSD card and 8 GB internal memory
PHYSICAL SPECIFICATIONS				
Weight (without battery)		340 g	1.09 - 1.13 kg	1.14 kg
Dimensions		139 mm x 81 mm x 31mm	Height 95 mm, ø 198 mm	Height 75 mm, ø 166.8 mm
Operating temperature		-40°C to 65°C	-40°C to 65°C	-40°C to 65°C
Proof against water, sand and dust		IP67	IP68	IP68
Shock		Withstands 1.2 m drop onto hard surface	Withstands 2 m drop onto hard surface	Withstands 2 m drop onto hard surface
POWER SUPPLY				
External power / Internal battery		- / Li-Ion 3.8 V, 6.12 Ah	Lemo® plug / Removable, Li-Ion 2.6 Ah	Lemo® plug / Hot- swappable, Li-Ion 3.4 Ah
Operating time (static/rover)		> 20h	9 h / 6 h	12h / 11h
WARRANTY				
Standard Warranty		1 year	1 year	1 year
Extendable warranty		Yes	Yes	Yes

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

 $Figures\ quoted\ assume\ normal\ to\ favourable\ conditions.\ Geo Max\ reserves\ the\ right\ to\ change,\ without\ notice,\ product\ offerings\ or\ specifications.$ 

## **GeoMax GNSS family**

Designed to increase your productivity on site



# **Field Controllers**

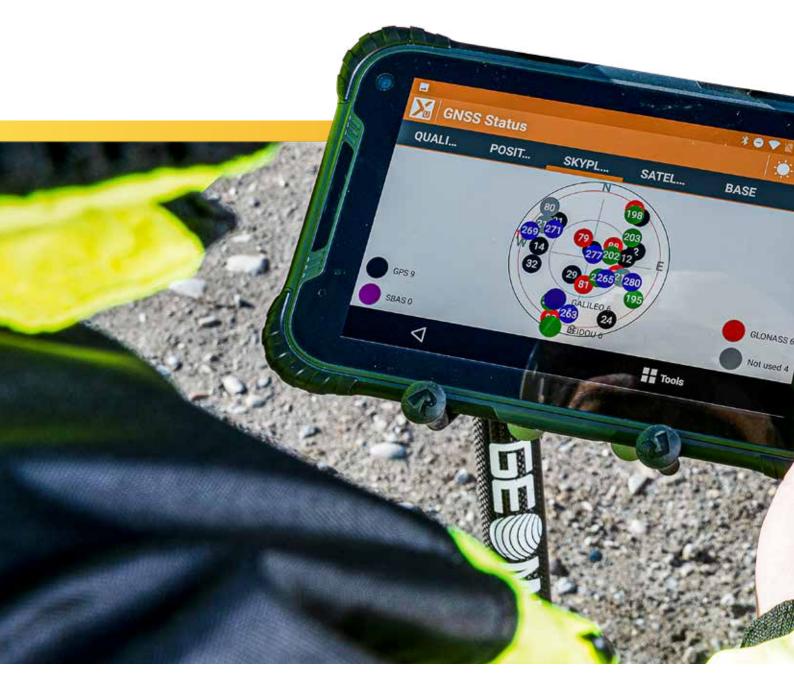
Based on an open platform, just use the software that best fits your requirements and rely on the robustness and precision of these easy-to-use devices.





## Zenius800

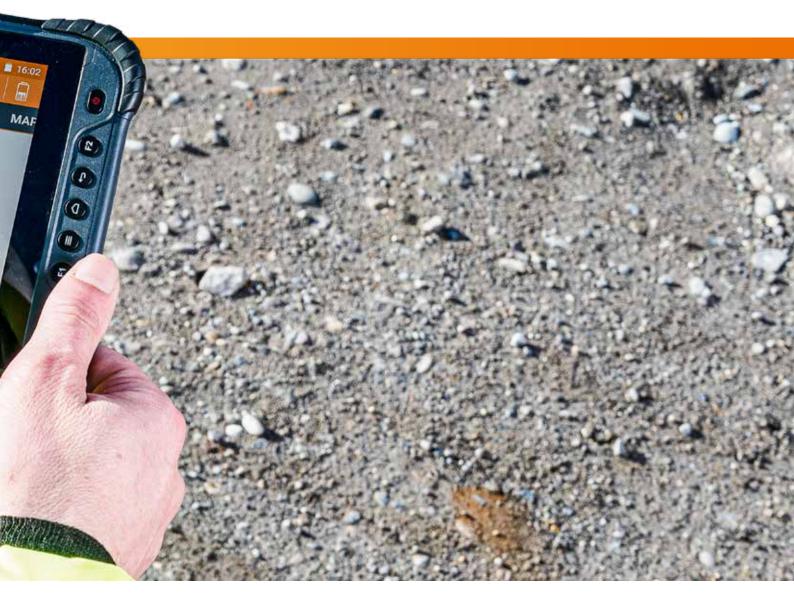
For your success on the modern job site



GNSS or TPS, stakeout or topographical survey - the Zenius800 is the optimal datalogger for every task in the field.

Working with CAD drawings or 3D models is simple and intuitive, thanks to the big screen that provides an overview of the complete picture. Make changes directly in the field so there is no need to go back to the office. Uploading time for large data files is minimized thanks to the high-performance octaprocessor.

This tablet does not need to hide outdoors. The multi-touch and sunlight-viewable screen allows for interaction 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.



Designed for X-PAD

The GeoMax X-PAD Software Suite was specifically designed to give you the efficient, affordable, and easy-to-use solutions you have been looking for to meet your multiple surveying and construction layout needs.



## Levels

GeoMax levels make it easy to complete your levelling tasks on time with the highest accuracy. Reliable and robust, even under challenging weather conditions.





## **ZAL Series**

Automatic levels covering all your needs



GeoMax ZAL Automatic levels are dependable and durable tools, complemented by a full range of accessories providing great quality at an affordable value.



### **ZAL300 Series**

Professional/high precision
Scan to find out more





### **ZAL200 Series**

Professional/standard tasks Scan to find out more





### **ZAL100 Series**

Economic choice/occasional use Scan to find out more





TECHNICAL DATA	ZAL330	ZAL324	ZAL232	ZAL220	ZAL132	ZAL124
Accuracy Standard deviation 1 km double-run	1.2 mm	2.0 mm	1.9 mm	2.5 mm	2.0 mm	2.0 mm
Image	Erect	Erect	Erect	Erect	Erect	Erect
Magnification	30 x	24 x	32 x	20 x	32 x	24 x
Shortest target distance from instrument axis	0.8 m	0.6 m	1 m	1 m	1 m	1 m
Multiplication factor	100	100	100	100	100	100
Compensator working range/setting accuracy	± 15' / 0.3"	± 15' / 0.5"	± 15' / 0.5"	± 15' / 0.5"	± 15' / 0.5"	± 15′ / 0.5″
Circular level sensitivity	10' / 2 mm	10' / 2 mm	8' / 2 mm	8' / 2 mm	8' / 2 mm	8' / 2 mm
Protection	IP57	IP57	IP56	IP56	IP54	IP54

# Laser Rotators & Receiv

Suitable for a wide range of applications, GeoMax laser rotators are true multi-purpose tools. They enable you to build simple and confident.



# /ers

## **Works when you do**



## **Zone Series**

### From start to finish, covering every need

Solidly built and dependable in any element, GeoMax laser rotators provide long-lasting operation and the flexibility of a full range of interchangeable accessories to accommodate your unique work preference, all at the best price-to-performance ratio.











- Error-free results
- 3 or 5 Year warranty
- Interchangeable accessories
- Long-lasting operations
- Outstanding price-toperformance ratio
- Dependable in any element
- IP68/67 rating
- Solid-built design

## Zone75 DG

Sturdy, Solid, and Precise



Capable of operating at a speed of 15 rps (rotations per second), the Zone75 DG is stable over long distances applications. The Zone75 DG not only gives you a reference for horizontal planes but also for slopes up to 15%.













	ZRB90 BASIC	ZRP105 PRO	ZRD105 DIGITAL	ZRD105B
Working diameter	600 m / 2000 ft	900 m / 3000 ft	900 m / 3000 ft	900 m / 3000 ft
Detection window	80 mm / 3.1 in	70 mm / 3 in	105 mm / 4 in	105 mm / 4 in
Numeric readout height	-	-	90 mm / 3.5 in	90 mm / 3.5 in
Beam catching	-	-	-	<b>✓</b>
Beam lock	-	-	-	✓



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





## Zone60 HG

Semi-automatic grade laser



Zone60 HG is made for exterior applications and is an ideal partner for concrete as well as formwork. With the slope function, time and temperature changes are frequently monitored to ensure accurate performance.

## Zone20 HV

Automatic multipurpose laser rotator



The Zone20 HV has the same specifications as the Zone20H, plus the capability of vertical levelling. Pair up the Zone20 HV with a longer-range remote to match the jobsite.

## Zone20 H

Automatic entry-level laser rotator



The Zone20 H, an economic and solid entry-level laser rotator, is designed with rugged housing and a straightforward interface. This laser offers all functions needed for regular and flexible use.

Scan to find out more on the **Zone60 HG Product Page** 



Scan to find out more on the **Zone20 HV Product Page** 



Scan to find out more on the **Zone20 H Product Page** 



## **MR240**

### Ideal for use with backhoes and mini-excavators



The GeoMax MR240's LED indicators show the position of cutting edge in relation to laser reference beam. The MR240 has three indicators in coarse mode, up to five in fine mode and is equipped with a magnet mount with extra strong rare earth magnets.

### Benefits

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





## **MR360R**

Accurate grade information for all visual machine control applications



The GeoMax MR360R's large 360° detection windows pick up any rotating laser from any angle. The MR360R incorporates a built-in vertical indicator that monitors angle of the stick, signalling of the stick and signals 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.

### Benefits

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





# **Pipe Lasers**

Consistent precision and durability have come to be expected with the compact, robust and fully featured GeoMax pipe lasers.





## **Zeta125 Series**

Designed for tough conditions





### **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 is also equipped with a durable cast-aluminium housing that uses die casts and extrusions for superior strength.



### Safe and Convenient

The Zeta125S series pipe lasers make your work more convenient and safer. Thanks to the unique vertical alignment, which can be easily performed with the remote control and a laser receiver, there is no need to climb down into the trench.



### **Stay Visible and Confident - Become Efficient**

The Zeta125G series with the green laser beam provides four times higher visibility, superior levelling accuracy and allows greater working distances. These features help you achieve the best visibility in nearly any working condition at a distance up to 200 meters. You can confidently achieve maximum efficiency with this pipe laser.

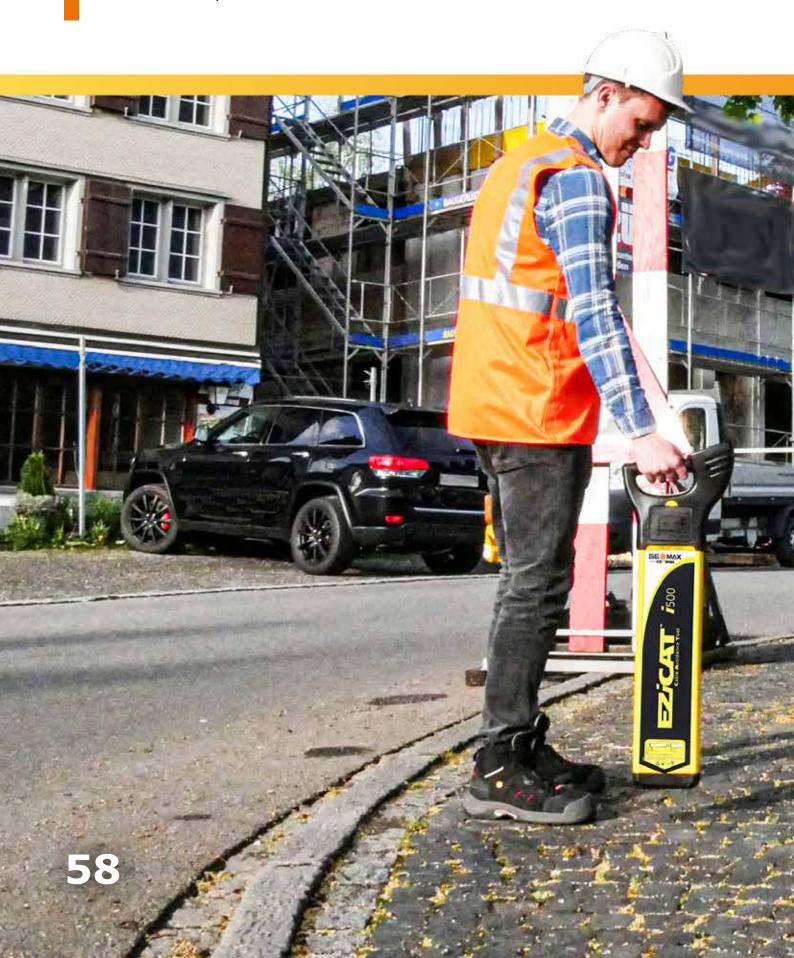




-10% to +40% Inclination angle

# **Cable Locators**

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





## **EziSystem**

Increase safety, decrease costs





### **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. 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**

Easily locate and trace buried utilities over greater distances

The EZiSYSTEM xf utility locating and tracing equipment makes locating buried utilities easy and efficient. The EZiSYSTEM xf has additional low frequencies enabling you to locate and trace utilities over longer distances and in congested environments.



Every year many site workers are injured and equipment is 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.

	EZICAT I500	EZICAT 1550	EZICAT 1750XF
Power	50 Hz model or 60 Hz model	50 Hz model or 60 Hz model	50 Hz model or 60 Hz model
Radio	15 kHz to 60 kHz	15 kHz to 60 kHz	15 kHz to 60 kHz
Auto	Power, Radio, 33 kHz	Power, Radio, 33 kHz	Power, Radio, 33 kHz
Transmitter mode	32.768 (33) kHz, 8.192 (8) kHz	32.768 (33) kHz, 8.192 (8) kHz	32.768 (33) kHz, 8.192 (8) kHz, 640 Hz, 512 Hz
Depth range	Line or Sonde 0.1 m to 3 m	Line or Sonde 0.1 m to 3 m	Line = 0.3 m to 3 m Sonde = 0.3 m to 9.99 m
Depth accuracy*	10%	10%	10%
Bluetooth®	-	-	Class 2 Low energy
GPS**	-	-	Chipset (1): u-blox®GPS; Type: GPS L1C/A; Accuracy (2): Horizontal Position 2.5 m Autonomous, 2.0 m SBAS, CEP; Start time: Cold 45 s typical, Aided 7 s typical, Hot 1 s typical
Memory capacity	-	-	64 MB
Battery	6 x AA Alkaline (IEC LR6) supplied	6 x AA Alkaline (IEC LR6) supplied	6 x AA Alkaline (IEC LR6) supplied
Battery operating time	40 h intermittent use (at 20 °C)	40 h intermittent use (at 20 °C)	40 h intermittent use (at 20 °C)
Dimensions (HxWxD)	760 x 250 x 85 mm	760 x 250 x 85 mm	760 x 250 x 85 mm
Weight with batteries	2.7 kg	2.7 kg	2.7 kg

<sup>\*</sup> Depth to an undistorted signal

<sup>\*\* (1)</sup> All data/information according to manufacturer u-blox@GPS; GeoMax Positioning does not assume any liability whatsoever for such information. (2) Accuracy is dependent upon various factors including atmospheric conditions, multipath, obstructions, signal geometry and number of tracked satellites.



### X-PAD VU - Cable locator software

X-PAD VU makes it easy to analyse activity data from EZiCAT cable locators. Simply download the data via Bluetooth® to see how the data survey was conducted and issue reports of the collected data. This software can be used with the EZiCAT i750xf as well as previous models of EZiCAT I-Series.

The software allows you to analyse the following traceable data:

- GPS positioning of use
- Time and date of use
- Usage duration
- User identification
- Used detection modes
- Detected buried utilities
- Display of calibration dates

X-PAD VU allows a map view of the GPS-enabled locators, a detailed dashboard analysis, and the ability to issue a summary report as well as incident reports.

# Accessories & Quality M

GeoMax equipment is built to withstand any conditions you run into during your daily work.



# lanagement

## Works when you do



## **GeoMax Accessories**

The perfect complement to every GeoMax solution

Scan to find out more on the Accessories Overview Page





### **ZTW100**

- Wooden tripod
- Shoulder strap and side clamp screws
- Packaged length 104 cm, extended length to 166 cm
- Weight 5.7 kg



### **ZTA100**

- Aluminium light weight tripod
- Shoulder strap and side clamp screws
- Packaged length 105 cm, extended length 167 cm
- Weight 4.5 kg



### **CT160**

- Aluminium tripod
- Shoulder strap and screws
- Range from 103 cm, up to 167 cm
- Weight 4.5 kg



### **ZCA102**

- Reflector carrier
- Tubular level
- Optical plummet for precise positioning



### **ZCA100**

Tribrach carrier for GNSS antennas



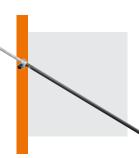
### **ZCA101**

Tribrach carrier with stub for prisms



### **ZPC200**

- Telescopic carbon fibre
- Aluminium pole for GNSS
- Extends to 230 cm



### **ZPC201**

- Telescopic carbon fibre
- Aluminium pole for TPS
- Extends to 230 cm



### **ZPC202**

- GNSS pole
- Length 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
- Extends to 30 cm
- With a pin

## **GeoMax Accessories**

The perfect complement to every GeoMax solution

**ZRP1**360° prism with soft bag



**GRZ122** 360° prism with 5/8″ for GNSS antenna



### **ZPR100 and ZTP100**

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



**ZTR101** 

Standard tribrach without optical plummet

### **ZTR103**

Standard tribrach with optical plummet

### **ZTR201**

Advanced tribrach without optical plummet



**ZMP101** 

Mini prism with tip



### **ZTM100**

- 6 x 6 cm
- For measurement of surfaces standard EDM



**ZDE100** 

Diagonal eyepiece



### **ZST101**

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



### **Li-Ion Batteries**

- ZBA301 for Zipp10 Pro/ Zoom40 total stations, 4.4 Ah
- ZBA10 Li-Ion Battery 7.4 V for Zoom10
- ZBA201 for Zoom total stations and Zenith15/16/ 25 Pro/40, 2.6 Ah
- ZBA400 for Zoom total stations, 4.4 Ah
- ZBA601 for Zenith35 Pro GNSS, 3.4 Ah
- ZBA700 for Zenith60/Zenius5, 3.4 Ah

### Chargers

- ZCH10 charger & ZAD10 adapter for ZBA10
- ZCH201 charger for ZBA201/400
- ZCH301 charger for ZBA301
- ZCH601 charger for ZBA601
- ZCH701 dual charger for ZBA700



**ZCB100** 

Backstrap for hard shell containers



**ZCT102** 

Hard shell container for two circular prisms, two carriers, two tribrachs



**ZCT207** 

Hard shell container for Zenith06 and accessories

### **GSS111**

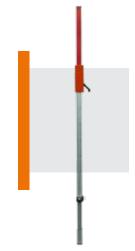
- Four-section telescopic staff
- Provides dual measuring faces
- Bar code and millimetre graduations

### **GSS113**

- Dual face high accuracy fibreglass levelling staff
- Length 3 m
- 1 section
- Barcode/E-Scale cm-graduation
- Circular bubble and handle

#### **CLR102**

- Level staff 5 m
- 4 sections
- Front side with E-graduation
- Back side with mm-graduation



### **FLEXI ROD**

- Laser level staff with a mm-scale on front side
- Clamp for slide adapter, with bubble

**Distance meter (Prism 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,

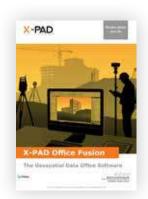
**Distance meter (Non-Prism Mode accXess):** Laser class 3R in accordance with IEC 60825-1 resp. EN 60825-1

## Selection of our portfolio

## We have more for you



X-PAD Ultimate



X-PAD Fusion



X-PAD 365



**Total Stations** 



**GNSS** 



Laser Rotators



Locators



X-PAD Suite







### geomax-positioning.com

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