GENERAL CATALOGUE

Works when you do

PART OF HEXAGON

GEOMAX

About us

GeoMax is an international and active company based in Europe that develops, manufactures and distributes quality surveying and construction equipment and integrated solutions at the best price-to-performance ratio.

Our comprehensive portfolio includes total stations, GPS/GNSS, 3D survey and 3D measuring, dataloggers, field software, optical and digital levels, lasers, machine guidance and cable locating systems and a large offer of accessories.

Being part of the Hexagon Group, a leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications, grants GeoMax access to state of the art development and production facilities in Europe, America and Asia.

Our technology is supported by a broad sales and service network covering all continents and over 100 branches. Through this continually growing distribution and service network, our products are available worldwide delivering outstanding price-performance ratio.

Portfolio

GEOMAX TOTAL STATIONS

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


GEOMAX
acc ess
1 Apps
2 Data
3 Settings
4 Survey
5 Transfer
6 Tools

GeoMax Total Stations
Zoom80 Series

With this motorised total station you have a lot of comfort and all the advantages of one-man surveying. The advanced positioning technology ensures that it "works when you do".

ROBOTIC SURVEYING

Imagine an instrument that does the majority of the work for you, allowing you to survey on your own. There is no need for assistance, it is quick to set up and has many easy-to-use functionalities, simplifying the entire process even more. Zoom80R models provide everything you ever desired in your daily work. Wide angle search technology quickly locates the survey pole and once positioned, it continues to follow the prism as you move.

AUTOMATED SURVEYING

All Zoom80 are equipped with target recognition technology, for automated centring on prisms. The total station needs only to face the prism in order for precise targeting and position measurement to automatically be performed by the instrument. With Automated Surveying, you are much more productive, since each measurement can be completed in only a few seconds.

NavLight

The telescope comes equipped with NavLight, a practical alignment aid for speeding up staking-out work. The flashing red and yellow lights guide the rodman quickly and exactly into the line of sight.

Technical data

Accuracy (ISO 17123-3)	5 ", 2 ", 1 "
Prism (range, accuracy)	3,500 m, 1 mm + 1.5 ppm
Prism, long-range (range, accuracy)	10,000 m, 5 mm + 2 ppm
Non-prism (range, accuracy)	1,000 m, 2 mm + 2 ppm*

SCOUT360 range 300 m, typical search time 5 – 10 sec
TRACK360 range (round / 360° prism) 800 / 600 m
AIM360 range (round / 360° prism) 1'000 / 800 m

* > 500 m: 4 mm + 2 ppm

GeoMax Zoom80S (Servo)
5", 2", 1"
AIM360, TRACK360

GeoMax Zoom80R (Robotic)
5", 2", 1"
AIM360, TRACK360, SCOUT360

STReAM360

SCOUT360
Scans the entire working area within seconds and quickly finds the point you need positioned. All measurement tasks can therefore be performed by one person.

TRACK360
Provides continuous tracking of targets. Once locked onto a prism, the instrument will remain targeted exactly on the moving prism.

AIM360
The telescope is perfectly aimed at any prism, without needing to look through the telescope. Measurements are performed automatically with constant and repeatable results.

accXess

accXess™ EDM technology
GeoMax's accXess EDM technology provides class-leading reflectorless measurements up to 1,000 m. The extra small laser footprint and sophisticated signal processing technology, ensures you maximum accuracy, regardless of the distance or conditions.

GeoMax Total Stations
Zoom35 Pro Series

With non-prism measurements of 1,000 m and 1" angle accuracy, the new Zoom35 Pro opens a new class of total stations for all those requiring highest performance on every levels.

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 significant 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

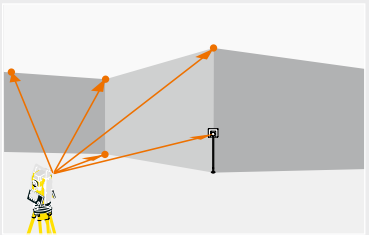
GeoMax Zoom35 Pro accXess10

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**
- **Set-up with resection**
- **Set out**
- **Area 3D & volume**
- **Remote elevation**
- **Construction**
- **Reference element**
- **CoGo routines**
- **Missing line measurement**
- **Two Prism Offsets**
- **Road**



GeoMax Total Stations
Zoom30 Pro Series

The Zoom30 Pro has all the functionality you expect from a total station right at your fingertips. A total station for all those, demanding high performance and ease that “works when you do”.

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 combines faster stake-outs with NavLight™ and outstanding non-prism distance measurement over 600 m. With the NavLight™ alignment aid, the rod man can quickly align himself to the line-of-sight without needing instructions.

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 (white target)
Accuracy reflectorless	2 mm + 2 ppm (>500 m 4 mm + 2 ppm)
Communication	USB, Bluetooth, USB host, RS232

GeoMax Zoom30 Pro accXess6

Distance measurement to reflector and 600 m reflectorless measurement

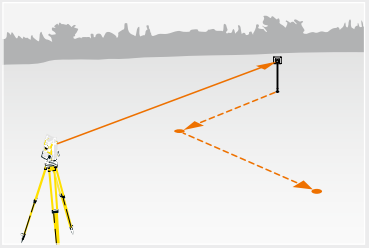
GeoMax Zoom30 Pro accXess4

Distance measurement to reflector and 400 m reflectorless measurement

POWERFUL APPS

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

- **Survey**
- **Set-up with resection**
- **Set out**
- **Area 3D & 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 Total Stations
Zoom20 accXess Series

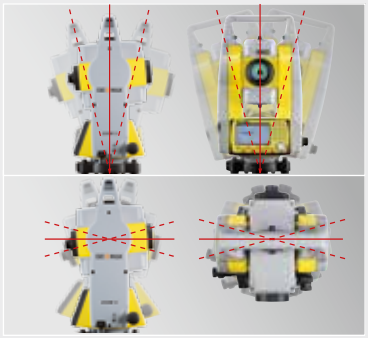
Class-leading reflectorless measurements: The extra-small EDM footprint and sophisticated signal processing technology ensures maximum accuracy and speed.

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.

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	2 mm + 2 ppm
Communication	USB, RS232

GeoMax Zoom20 accXess4

Distance measurement to reflector and 400 m reflectorless measurement

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 Total Stations
Zoom20 Pro Series

The Zoom20 Pro withstands the toughest environments. With the optional polar certification, the Zoom20 Pro is individually tested at -30° C. Our extensive factory tests ensure that GeoMax “works when you do”.

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° C. With our extensive factory tests, you can be sure that GeoMax “works when you do!”.

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

GeoMax Zoom20 Pro
Distance measurement on reflector

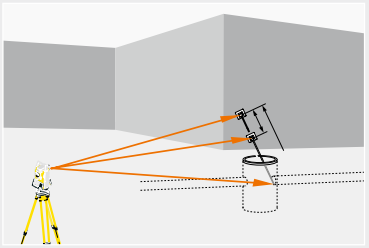
Technical data

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 (white target)
Accuracy reflectorless	2 mm + 2 ppm (>500 m 4 mm + 2 ppm)
Communication	USB, RS232

POWERFUL APPS

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

- **Survey**
- **Set-up with resection**
- **Set out**
- **Area 3D & volume**
- **Remote elevation**
- **Construction**
- **Reference Line**
- **Reference Arc**
- **Grid SetOut**
- **Column Offset**
- **CoGo routines**
- **Missing line measurement**
- **Two prism offsets**



GeoMax Total Stations
Zipp20 Open WinCE® Series

Operate it your way, store it your way, process it your way! Running fully open Windows® CE allows you to operate the field software of your choice onboard the Zipp20 – Open WinCE® Series.

TOTALLY OPEN WinCE®

The Zipp20 is a fully open WinCE® total station. Featuring GeoMax FieldGenius, 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 highest flexibility. Data and file exchange using the USB stick makes working with the Zipp20 quite simple and easy.

TOTALLY FEATURED

All the openness and connectivity combined in 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 (Zipp10 R Pro)	250 m / 400m (white target)
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 5”, 2”

Distance measurement on reflector and 250m reflectorless

GeoMax Zipp20 R4 5”, 2”

Distance measurement on reflector and 400m reflectorless

Zipp20 - Open WinCE® Series
Featuring GeoMax FieldGenius, GeoMax Layout Pro, X·PAD, Carlson SurvCE or any localised field software, the Zipp20 allows you to work the way that best suits your needs.

With integrated Bluetooth® and the capability to connect to any tablet or data logger, the Zipp20 provides you with highest flexibility.

All this combined in 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."

Carlson

MicroSurvey®

X·PAD for Android™

GeoMax Total Stations
Zipp10 Pro Series

The Zipp10 Pro is your economic choice when price counts as much as performance. It provides seamless data flow via a USB stick, coaxial reflectorless measurements and a full set of applications. These benefits are proving again best price-to-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 laserbeam 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 Pro 5", 2"

Distance measurement on reflector

GeoMax Zipp10 R Pro 5", 2"

Distance measurement on reflector 250 m non-prism distance measurement

THE COMPLETE TOTAL STATION

With its 250 m reflectorless measurement range, 2” and 5” angle accuracy, large bright display and easy-to-use applications, the Zipp10 Pro is your ideal tool for all surveying or construction tasks.

The Zipp10 Pro is the world’s first total station in its class featuring easy transfer via 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. Keeping your total station where you need it – in the field! Zipp10 Pro – “works when you do".

APPLICATIONS

- Data collect
- Set out
- Resection
- Area & volume
- Remote elevation
- 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 GPS technology in the field increasing your productivity and taking your performance to the new level.


Base
Rover
1.37
1.40
1.45
1.50
1.55

GeoMax GNSS
Zenith25 Pro Series

Equipped with the most advanced GNSS receiver technology, Zenith25 Pro delivers ultimate performance. Even in extreme environments, the reliable, robust GNSS system “works when you do”.

EXTREMELY RUGGED

The Zenith25 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.

TRULY FUTURE-PROOF

With its internal UHF, its 3.75G Penta band GSM and the full support of GPS, GLONASS, Galileo, BeiDou and SBAS systems, the Zenith25 Pro Series is truly future-proof and suitable for any application.

POWERFUL HANDHELD

The PS336 series is a high performance, robust handheld for real time communications, even in harsh conditions. With Windows® embedded, this datalogger provides an open system to any compatible software, including GeoMax FieldGenius and X·PAD.

Receiver specifications

Q-Lock™ technology	High fix availability and reliability
Max. No. of satellites	60 satellites simultaneously
Channels	120, dual frequency
Satellite signals tracked	GPS L1, L2, L2C; GLONASS L1, L2; BeiDou B1, B2; SBAS
Positioning rate	20Hz, 5Hz;
Warm/cold start	5 s / 43 s

Receiver accuracy*

Static horizontal	5 mm ± 0.5 ppm (rms)
Static vertical	10 mm ± 0.5 ppm (rms)
Kinematic horizontal	10 mm ± 1 ppm (rms)
Kinematic vertical	20 mm ± 1 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.

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.

This is all combined in a system robust enough to withstand a 2 m topple over and a complete submersion under water.

NovAtel ON BOARD

GeoMax GNSS
Zenith10 & 20 Series

The Zenith Series are completely flexible systems, with all of the communication devices integrated into the antenna. A rugged handheld packed with features supports the work in demanding environments and ensures an excellent price-to-performance without compromising quality.

FULLY INTEGRATED GNSS

Zenith10 & Zenith20 are complete and fully integrated satellite positioning systems. They consist of only two main components, a GNSS antenna and a handheld computer that can be setup on a pole or tripod.
noThe integrated wireless technology, provides a completely cable-free and light-weight solution that is ready for an entire day's work.

QUALITY GNSS

Equipped with state-of-the-art NovAtel satellite receiver technology, the Zenith10 & Zenith20 provide maximum performance. The AdVance® RTK technology, developed by NovAtel, ensures maximum positioning availability under challenging conditions.
Both receivers can track satellite signals of the GPS and GLONASS type. The Zenith20 additionally supports BeiDou and Galileo.

COMPLETE FLEXIBILITY

The Zenith10 & Zenith20 are completely flexible systems, with all of the communication devices integrated into the antenna. It's easy to switch between the UHF radio to receive correction data from a local reference station and the GSM modem to receive corrections from a regional network. At times when no corrections are available, raw data can be easily logged for post-processing in the office. The Zenith10 & Zenith20 can also operate as a local reference station, transmitting data either with the internal radio or an external high power transmitter.

Receiver specifications

NovAtel AdVance® technology	
Zenith10	72 channels (GPS/GLONASS), max. 36 satellites simultaneously
Zenith20	120 channels (GPS/GLONASS/Galileo/BeiDou), max. 60 satellites simultaneously
Satellite signals tracked	GPS L1, L2, L2C, GLONASS L1, L2, Galileo*, BeiDou
Raw measurement & position outputs	5 Hz , 20Hz optional
RTK signal initialization	typ. less than 10 sec***
Initial capture time	< 15 sec***
Internal memory	256 MB

Receiver Accuracy**

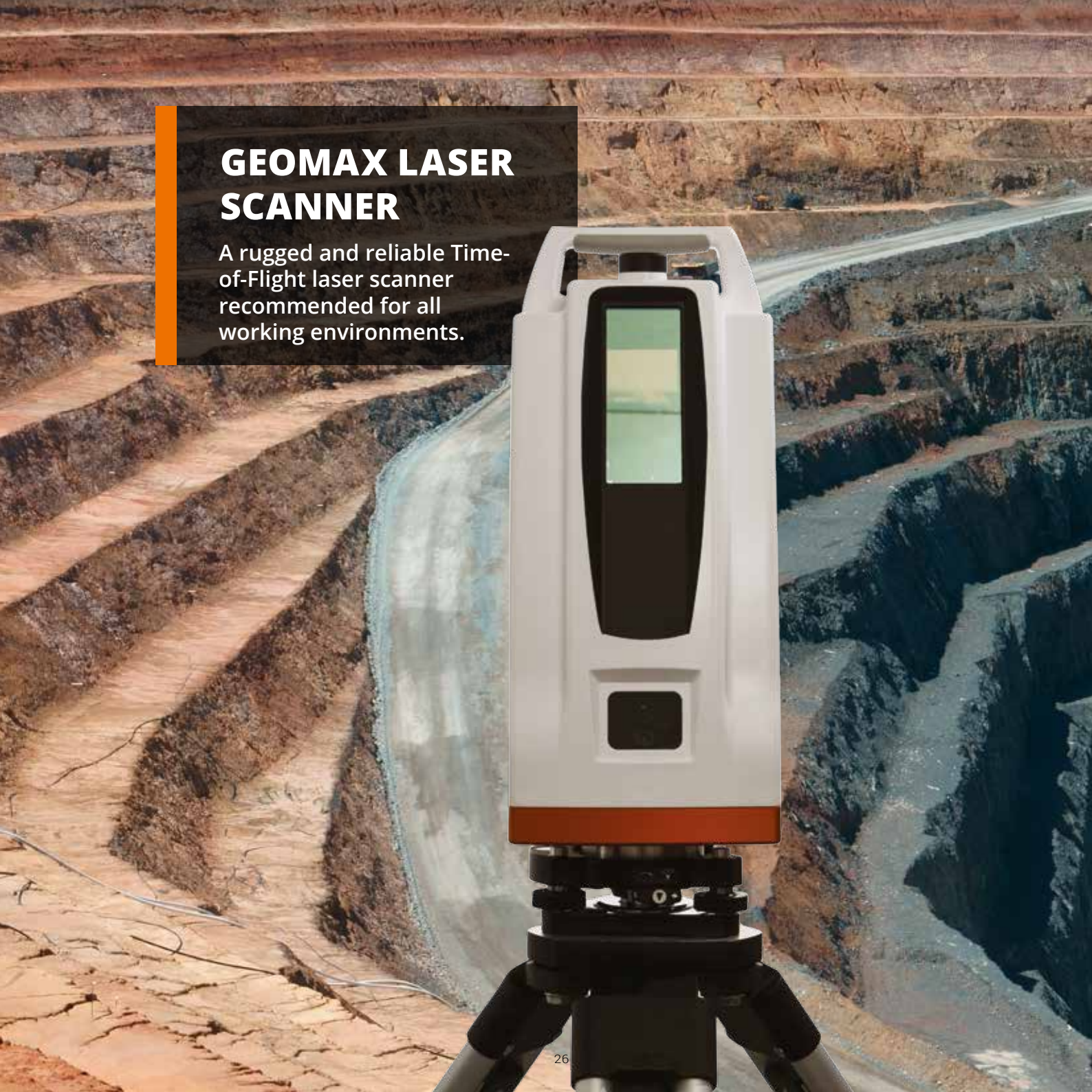
Static horizontal accuracy	5 mm ± 0.5 ppm (RMS)
Static vertical accuracy	10 mm ± 0.5 ppm (RMS)
Kinematic horizontal accuracy	10 mm ± 1 ppm (RMS)
Kinematic vertical accuracy	20 mm ± 1 ppm (RMS)
DGPS/RTCM differential positioning	0.25 m (RMS)

* The optional Galileo tracking will be made available once there are sufficient of these satellites.
** The position accuracies depend on various factors including number of satellites, geometry, ionospheric conditions, multipath, etc.

NovAtel
ON BOARD

GEOMAX LASER SCANNER

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



GEOMAX 3D MEASURING MICRO ROBOT

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

GeoMax Laser Scanner
Zoom300 Series

Zoom300 is a rugged and reliable Time-of-Flight laser scanner recommended for all working environments.

ROBUT 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 extrem weather condiotions 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 optimize 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
Operationg 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

FRAMEWORK

This laser scanner support is particularly useful for the scanning of closed environments such as caves, architectural structures and tunnels, where ceilings are particularly high. It allows the scanner to perform a full surface scan through a 240° rotation.

GeoMax 3D Measuring & Micro Robot
Zoom3D Series

Easy-to-use and fast 3D measuring instruments, the Zoom3D Series are ideal for indoor as well as outdoor applications. It can be upgraded to an innovative and user-friendly robotic total station: simply position it and turn it on, the Zoom3D will measure and layout any project site.

YOUR PERFECT PARTNER FOR INDOOR TASKS

The Zoom3D user-fiendly onboard software helps with a wide range of indoor applications such as measuring, setting out or plumbing points. Levelling can now be completed with greater ease and speed, then exported in most common file formats.

UPGRADE IT TO A MICRO ROBOT SOLUTION

For your outdoor tasks, the Micro Robot solution is equipped with target recognition technology that automatically and easily centres and follows the target, allowing surveys and stakeouts in small construction sites.

PLUG AND PLAY SOLUTION

With a very simple configuration and equipped with an auto levelling feature, a plug-and-play solution that will allow you to speed up in your daily work.

GET STARTED IN 2 BUTTON PRESSES

1. Get out of the box
2. Put it on the floor or on a tripod
3. Turn it on, it will level automatically
4. Connect it to your datalogger
5. Start working!

Technical data

Goniometer (Hz/V)	
Range	Horizontal 360°; Vertical 250°
Accuracy	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°


Panasonic
X·PAD for Zoom3D
Jobs
2015-7-31-Job1
Measure
Import
Export
Line scan
Photos
Secure points
Stakeout
Working sheets
Projector
version 1.0 · About...

GEOMAX DATALOGGERS AND GIS HANDHELD

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.


dtm
11:58
100
101
102
20m
Settings
New
Swap
Delete
GEOMAX
Measure Point 7000
Check Pnt
HT: 1.800'
Measure
30°
<No Line>
Next ID
<No Desc>
Measure Point 7000
Check Pnt
HT: 1.800'
Measure
30°
<No Line>
Next ID
<No Desc>

GeoMax Dataloggers
PS336 Series

These rugged field ready Windows Mobile® handhelds were built to meet GeoMax requirements for power, functionality and reliability, ensuring that they always “work when you do”.

FULLY EQUIPPED

The PS336-E model contains high-speed communication technology for internet connection to all network types. Built-in GPS receiver, E-compass, altimeter and 5M pixel auto-focus camera are neatly integrated into an all-in-one solution.

EXTREMELY RUGGED

The PS336 series is a high performance fully rugged handheld for real-time communications even in harsh conditions. It is rated IP68 dust and waterproof and meets military standards.

FULLY FLEXIBLE

The featured Windows Mobile® provides an open system for any compatible software, such as GeoMax FieldGenius, X·PAD, SurvCE, etc. for full connectivity to all GeoMax devices.

The PS336-E extended model's expansion slot enables the fitting of a long Range Bluetooth® cap which can be used as remote control in combination with the Zoom80 robotic Total Station.

Technical data	PS336	PS336-E
Wireless LAN	•	•
Internal Bluetooth®	•	•
Micro SD card slot	•	•
Up to 32 GB memory *	•	•
29 keys	•	•
Illuminated keys	•	•
5M pixel autofocus camera		•
48 channels GPS receiver		•
Electronic compass		•
Altimeter		•
Long-range Bluetooth® **		•

* Optional, ** Requires optional long-range Bluetooth® cap

PS336	Standard
PS336-E	Extended

Physical specifications

Weight: 0.53 kg (PS336)
Operating temp.: – 30°C to 60°C
Protection class: IP68 dust- and waterproof / MIL-STD-810G
Humidity: 95 %, non-condensing

Computing platform

Operating system: Windows® Embedded Handheld 6.5
Processor: Texas Instruments 1 GHz
Memory: Up to 32 GB *

Interface

Keyboard: 29 keys, illuminated
Display: 3.5” Full-VGA Quadra-Clear™ technology colour & touchscreen
I/O interface: serial, USB On-The-Go, DC jack

Power supply

Internal battery: Removable Li-Ion 5.6 Ah / 3.7 V
Operating time: Up to 15** hours
LifeSupport™: Battery swap without shutdown

* Optional, **New battery, at 20°C

GeoMax Dataloggers
Z710 for X·PAD Android

X·PAD for Android presents a new way of working, based on the most evolved and technologically advanced platform for mobile devices. For the first time, software designed for topographic survey and staking out in the field is available on Android with a wide range of user-friendly features. Used in conjunction with GeoMax instrumentation, X·PAD for Android will change your way of working forever.

THE CONTROLLER? IT'S UP TO YOU

X·PAD for Android can be supplied with a rugged tablet, featuring a 7" touch screen with the breadth and brightness to give the display instant clarity, so you can view the data quickly and with minimum effort in all conditions. Or you can also opt to use the X·PAD on your existing tablet or smartphone. It all adds up to maximum flexibility for you, the user.

AUGMENTED REALITY, GET THE FULL PICTURE

How can augmented reality be a useful tool in topographic surveys and stake-out? Here's how. Simply point the camera to the area of interest and you can immediately see where the points and elements to be staked out are. X·PAD will guide you to the vicinity of the point and then to the exact location. But you can also use augmented reality to see what is not visible, such as underground pipes, cables and connections. X·PAD allows you to integrate reality with your data.

YOUR DATA ON GOOGLE MAPS.

With X·PAD you can see your survey and your design superimposed on a satellite map via Google Maps at any stage. See your position on the map, check the position of your reference points or measure distances and surfaces directly from CAD. This facility offers a revolutionary way of working.

GEOMAX Z710

X·PAD Android on the Z710 tablet can be used for all GeoMax Zenith GNSS antennas as well as manual and motorised Zoom Total Stations.

COMPACT

Built to house a brilliant 7” display, the Z710 comes with 800 g light and is small enough to hold with just one hand, yet big enough to help you get the job done.

The Z710 is specifically engineered to be protected against 2 m drops, shocks, spills, vibration and more. Equipped with tempered glass and a temperature range of – 20°C to 50°C.

Built-in GPS, combined with E-compass and 3-axis accelerometer, the Z710 is the perfect device for anyone using GPS data in the field.

GeoMax GNSS
Zenith04 Series

As standalone handheld GPS device for all GIS applications or as data logger for GNSS devices and total stations, Zenith04 is your equipment choice when price-to-performance counts.

FULLY EQUIPED
Zenith04 is equipped with all the features you could possibly want: GPS+SBAS 50 channels receiver, quad-band GSM/ GPRS, Wi-Fi, Bluetooth®, 5 MP camera, full numeric keyboard and much more.

FULL SET OF COMMUNICATIONS
Its full set of communications and features is complemented with the flexibility and ease of running all your applications on Windows Mobile® and using Office Mobile for your daily work.

FULL FLEXIBILITY
Whether you use the ergonomic Zenith04 with its built-in high sensitivity GPS for your GIS applications or you use it as a data logger, easily combining via Bluetooth® to your GNSS antenna and total station, the Zenith04 offers you the full flexibility you need in a handheld.

Technical data

Channels	50, single frequency
Satellite signals tracked	GPS L1, C/A code
RTK accuracy	1.5 m
Standalone accuracy	1-3 m
SBAS	WAAS / EGNOS / MSAS / GAGAN
Operating system	Microsoft Windows Mobile® 6.5
Memory	TF extensible to 32 GB
USB	Mini waterproof USB connector
Wireless	Integrated quad-band GSM/GPRS, phone function
Bluetooth®	Bluetooth® V2.0 support EDR
Wi-Fi	802.11 b/g Wireless LAN
Camera	AutoFocus 5 MP


50 GPS channels
Bluetooth®
and Wi-Fi
3.7” touch
screen
Windows
Mobile® 6.5
Fully
numeric
keyboard
Quad-band
GSM/GPRS
5 MP
camera
Handstrap
Stylus
Rugged
design
33 mm
thick


dtm
11:58
100
101
102
20m
Settings
New
Swap
Delete
GEOMAX
Send
End

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.

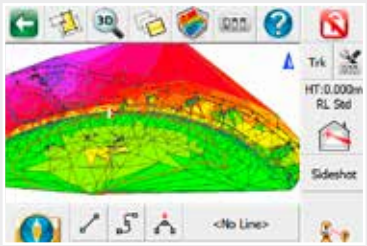
Carlson

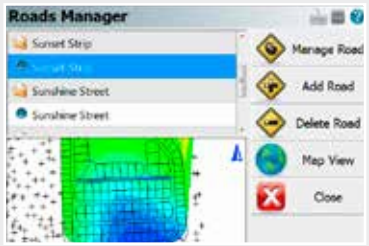
MicroSurvey®

X·PAD for Android™

GeoMax Software
FieldGenius Premium

GeoMax FieldGenius delivers you a powerful data collection software for all your daily surveying tasks in the field. Fully equipped with four integrated modules, FieldGenius covers the entire range: from manual Total Stations to Robotic to GNSS.





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/GPS
Support for RTK GPS receivers

Advanced
Roading, surfacing, slope staking functions

Robotic
Functionality for robotic total stations

GeoMax Software
Layout Pro

GeoMax Layout Pro is a simple-to-use locating program designed specifically for construction layout and MEP contractors. GeoMax Layout Pro gives you all the tools you need to layout your points accurately and easily.

CONTRACTOR FRIENDLY

- Code-free linework
- Linework is created automatically
- No need to connect the dots back at the office

EASY LAYOUT

- Stake points/lines by selecting the map screen.
- Select the points for staking, Layout Pro will automatically guide your layout process
- Stake DXF CAD drawings by selecting DXF entities

EASY SETUP

- Begin work quickly
- Reference point routine to establish your total station location
- Reference point check to confirm and to check your position

ADVANCED DISPLAY AND PLATFORMS

- Map screen to lay out data and collect as-built details
- Easy to use menu structure
- Portrait and landscape devices supported

AS-BUILT AND TOPOGRAPHIC TOOLS

- As-built routines to measure existing conditions for as-built reports or drawings
- Export to other third party applications
- Cut / fill analysis, volume calculations or DTM model creation

ROAD ALIGNMENT LAYOUT

- Input alignment data from paper drawings
- Input horizontal alignment, vertical profiles and templates

GeoMax Software
X·PAD Multi Positioning Software

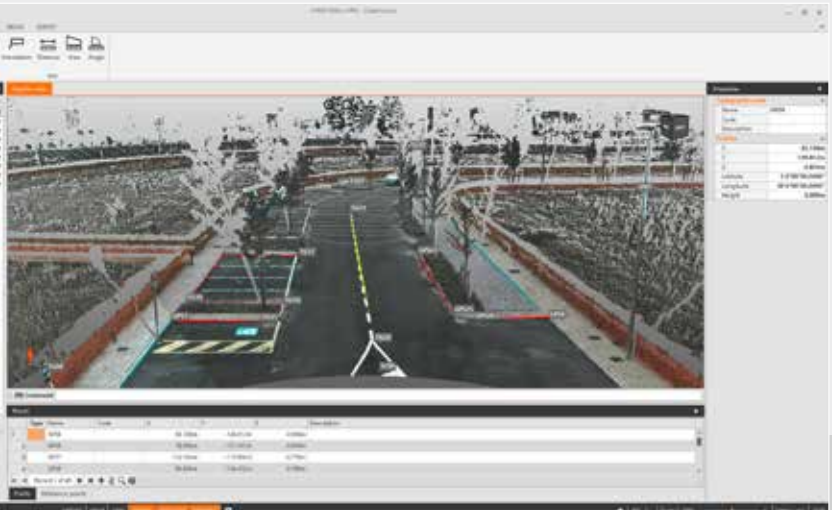
A new concept in software for processing topographical data, capable of integrating a range of different information such as: calculations, scan registration, management of point clouds and photography, plus topographical drawing functionality. Simplicity and interactivity all in one application!

ALL IN ONE

A single software program adds up to a more efficient workflow. With X·PAD is possible to load data from total stations, GPS and laser scanners and calculate, view and manage it without having to export the data from one program to another. You can connect a TPS or GPS survey to each laser scan and view everything together.mThis is real integration!

DATA ORGANIZATION

X□PAD easily handles a multitude of different types of data: measurements, coordinates, drawings, and point clouds. The Project Manager's organization of the data within the same file is orderly and logical. The management of multiple survey sessions and different groups of drawings is made easy as the relevant data can be quickly reviewed at anytime.



DATA VISIBILITY

We have developed a powerful graphics engine allowing the user to work in either 2D or 3D. You can view and manage data easily even when displayed as a spreadsheet. Functions for searching, filtering and editing make viewing and managing data straightforward.

GeoMax Software
X·PAD for Android

X·PAD for Android is the world's first professional surveying and construction software base on Android. It presents a new way of working based on the most evolved and technologically advanced platform for mobile devices. X·PAD for Android offers all the known feature of its Windows equivalent and even more. Used in conjunction with the GeoMax manual and robotic Total Stations as well as with the GNSS X·PAD Android will change your way of working.

AUGMENTED REALITY - GET THE FULL PICTURE

Simply point the camera to the area of interest to see the elements to stake.

FINDING YOUR PROJECT- AS SIMPLE AS THAT

Don't remember the name of file, but know when and where it was done? Simply chose your project via location on Google maps or on the calendar.

YOUR DATA ON GOOGLE MAPS

Superimpose your data on a satellite image via Google maps at any stage of your project to check for reference points or measure directly in the drawing.

GeoMax Software
X·PAD Survey & Construction

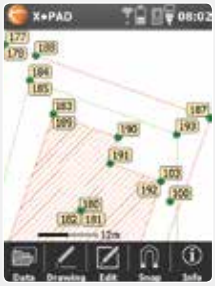
X·PAD Survey
X·PAD Survey combines a complete solution for all surveying tasks with a simple and easy to learn user-interface. Covering all tasks from simple stake-outs via terrain models and volumes, to road stakeout and CoGo X·PAD boosting your productivity and flexibility in the field.

X·PAD Construction
X·PAD Construction also enables non-surveyors such as foreman to conduct all the stake-out and measuring routines they face every day independently. This boosts productivity and enables them to work more independently. Strictly following construction terminology and procedures, X·PAD Construction “speaks” the language of the construction site.

The Windows based X·PAD Survey as well as X·PAD Construction can be used in combination with all GeoMax manual and Robotic Total Stations as well as with GNSS.

COLLECT MORE THAN JUST COORDINATES
X·PAD goes further than measuring the position of the point, you can integrate positions photos, notes and voice comments as well. Quick codes allow you to create your own customer panels for the most used codes.

STAKE OUT WITH YOUR EYES CLOSED
Let the voice guidance navigate you to the target without even looking at the display or use the extra large compass for easy visual navigation. Stake out directly from any imported CAD drawing without time-consuming conversion process.

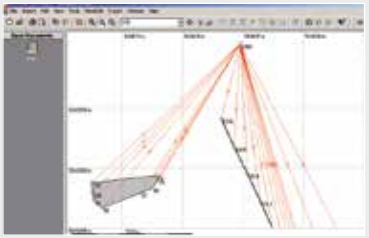


SURVEY AND DRAW AT THE SAME TIME
The innovative automatic drawing system operated by feature codes allows you to see the map coming to life, point by point, without requiring long and complex coding.

... and still more
- CoGo
- Terrain models and volumes
- Road stake out
- CAD
- As-built check
- Monitoring
- Cadaster
- Bathymetry ...

GeoMax Software
GGO GeoMax Geo Office

GeoMax Geo Office (GGO) is the ideal office software companion for your GeoMax field equipment. With complete seamless dataflow, your field results are effortlessly transferred to the office environment ready for further processing, CAD creation or direct delivery to clients.



EASY-TO-USE

Following Microsoft Windows standards, GGO is easy-to-use, even for novice PC users. Through 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 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

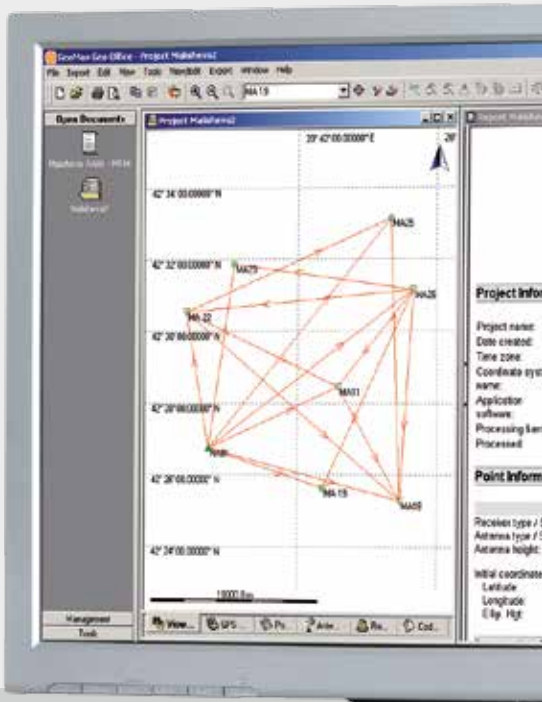
GGO has a full suite of tools that allow you to get the most out of your equipment before going on-site. Once you’ve completed your survey and seamlessly imported your field results into GGO, all observations are immediately available for visual confirmation of field activities. If errors or changes are found they can be easily edited to deliver perfect results.

DATA PROCESSING AND REPORTING

When post-processing of GNSS (GPS+GLONASS) 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 customised 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 ELECTRONIC THEODOLITE

Highly flexible and accurate tool for checking angles, alignments, grade work and short range levelling.

GEOMAX LEVELS

GeoMax levelling systems make it easy to complete your daily levelling tasks on time with the highest accuracy. Rely on their comfort and robustness when working indoor or outdoor, even under challenging weather conditions.

GeoMax Digital Theodolite
Zipp02

Closing the gap, Zipp02: For all your general construction tasks requiring accurate angle measurement. Affordable, easy to use, flexible – quite simply, it “works when you do”.

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 and set 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 without laser plummet	36 h

GeoMax Digital Level
ZDL700 Series

At GeoMax we understand that you require accurate results and demand ease of use in combination with fast operation. That's why we've introduced the ZDL700 digital level for the surveying and construction world. Now you can 'go digital' for your entire levelling task with a product that delivers outstanding price-performance and "works when you do!".

QUICK, EASY AND ERROR-FREE

The super fast measurement speed of less than 3 seconds in combination with the simplicity of the one-push measure and store functionality provides faster, more economical workflows. Digital reading combined with internal memory make misreadings and operator interpretation errors a thing of the past.

LEAVE THE CALCULATOR IN YOUR POCKET

The onboard adjustment program, height difference calculation, inverse staff measuring mode, in combination with various measuring configurations enable you to execute all calculations with the ZDL700. 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	± 0.7 mm/km
Distance accuracy	D < 10 m, 10 mm D ≥ 10 m, 0.001 x D
Maximum range	105 m
Single measurement speed	< 3 seconds
Internal memory	2,000 measurements

GeoMax Automic Levels
ZAL300 Series

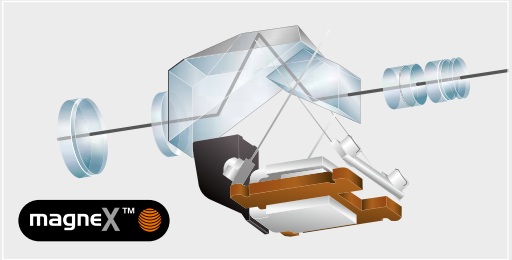
Get all your tasks done with GeoMax's flagship level. From daily levelling tasks to high accuracy, the ZAL300 Series is your first choice when robustness, comfort and accuracy count.

FLEXIBLE AND ERGONOMIC

With four different types of magnifications, 20x, 24x, 28x and 30x, the ZAL300 series offers the accuracy of your choice. The patented *magneX*™ compensator system from GeoMax used in the ZAL300 series with magnetic dampening makes stuck a thing of the past.

Technical data

	ZAL330	ZAL328	ZAL324	ZAL320
Magnification	30 x	28 x	24 x	20 x
Minimum focusing distance	0.8 m	0.6 m		
Compensator damping system	magneX™, automatic, magnetic-damped			
Standard deviation for 1km double-run levelling	1.2 mm	1.5 mm	2.0 mm	2.5 mm
Horizontal fine motion screws	Double-sided endless drive			
Dust and water resistance	Conforms to IP57 (Gas filled telescope)			
Base / base screw	Concave and flat / 5/8 "			



GeoMax Automatic Level
ZAL100 Series

Suitable for outdoor as well as for indoor use the user friendly ZAL100 Auto Level Series from GeoMax is your guarantee to get the job done, accurately and on time.

BUILT TO LAST

With the ZAL100 Series, GeoMax introduces an automatic level to the construction industry that is designed for your daily levelling tasks with an outstanding price-to-performance ratio. Meeting the IP54 class specifications guarantees waterproofing of the ZAL100 Series and provides you with an instrument that “works when you do!”.

Technical data	ZAL132	ZAL128	ZAL124	ZAL120
Magnification	32 x	28 x	24 x	20 x
Image	Erect			
Minimum focusing distance	< 1.0 m			
Compensator damping system	Automatic, air-damped			
Standard deviation for 1km double-run levelling	2.0 mm			2.5 mm
Graduation / intervals	360 ° / 1 °			
Horizontal fine motion screws	Double-sided endless drive			
Dust and water resistance	Conforms to IP54 (IEC60529)			
Base / base screw	Concave and flat / 5/8 ”			

GEOMAX LASER ROTATORS

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

GEOMAX PIPE LASERS

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

GeoMax Laser Rotators
ZEL400 Series

With its proven performance the ZEL400 laser rotator series covers the whole range from internal applications to general construction – a true multi-purpose tool.

SOLID AND ECONOMIC
Totally automatic thus easy and fast to setup, and in combination with advanced technology, GeoMax delivers a laser rotator with outstanding price-to-performance ratio. Its ruggedized design, protected head and waterproof housing makes the ZEL400 series the tool for all your tasks that "works when you do!".

Technical data	ZEL400HV	ZEL400H+	ZEL400H
Range	300 m (diameter)		
Levelling range	± 10 %		
Levelling	h & v auto	h auto & v semi-auto	h auto
Accuracy (at 30 m)	h: ± 3 mm v: ± 3 mm	h: ± 3 mm v: ± 10 mm	h: ± 3 mm v: N.A.
Tilt alert control	yes		
Battery	2 Alkaline D size, 160 hours, NiMh rechargeable 50 hours		
Detector/remote control	ZDR300 Detector w. integrated remote control		ZDT200 Detector

GeoMax Laser Rotators
ZLT300/200 Series

At GeoMax we understand that your equipment should be as flexible as you are. With the ZLT300 and ZLT200, we introduce a series of multi-purpose lasers that cover the entire range from machine control, site work, pipe laying to interior finishing.

WE LEVEL, YOU WORK

Now is the time to stop chasing bubbles to get your job levelled. And the good thing is that you are only one button push away. From site work and levelling to alignment, pipe laying, interior finishing and civil engineering projects, the ZLT300 and ZLT200 are the partners that help you to get the job done in time, with the required accuracy and dependability. And all of this with the price-to-performance ratio GeoMax is known for.

DUAL GRADE SLOPES

With manually adjustable grades, you can simply match slopes in one or two axis by using the laser in manual mode. While used on one manual slope, the automatic cross axis self levelling provides you with maximum security.

Technical data	ZLT300	ZLT200
Range	800 m (diameter)	
Levelling range	± 8 % ± 5 °	
Levelling	Automatic horizontal and vertical	Automatic horizontal
Accuracy	±10 mm at 100 m	
Tilt alert control	User definable laser shut-off	
Laser battery life	50 h with internal rechargeable NiMH battery	
Environmental	IP67 waterproof	
Detector/remote control	ZDR300 Detector with integrated remote control	ZDT200 Detector

GeoMax Laser Rotators
Zone50 Series

Featuring a fully automatic as well as an automatic model, the Zone50 Series provides the perfect match for any work site requiring highest precision, outstanding durability and extensive range.

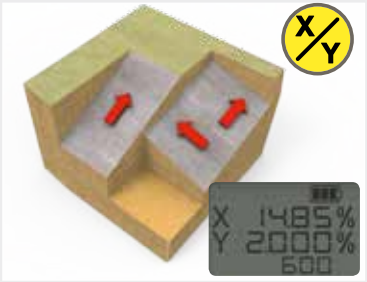
Zone50 FA

The Zone50 FA is a fully automatic dual grade laser with an aluminium-cast housing for withstanding even the harshest conditions. As a fully automatic laser, it not only constantly checks but also permanently readjusts the defined grade to ensure highest accuracy and dependability.

Zone50 A

The Zone50 A is an Automatic laser with grade capability. Equipped with the same sturdy aluminium-cast housing and IP class 67 as the Zone50 FA, this laser is built to last on any jobsite under any conditions. With more than 100 m range for the remote and 300 m laser radius, the Zone50 A provides you with an extensive work range.

Technical data	Zone50 FA	Zone50 A
Range	Depends on receiver: >500m radius (Laser class 3R) >300m radius (Laser class 2)	>250m radius
Levelling range	± 5 °	
Levelling	-15% up to 15%	-10% up to 10%
Accuracy	±5mm at 100 m	
Tilt alert control	yes	
Battery	NiMH; changing 4h	
Environmental	IP67 dust and waterproof	
Detector/remote control	(FAR) RG50FA	(AR) RG50A



PRECISION INPUT OF SLOPES

Enter your slopes in a range of ± 15 % (± 10 % for Zone50 A) with highest precision either via the remote unit or directly at the laser.

DUAL OR SINGLE GRADE

All lasers of the Zone50 Series allow you to use two independent axes to define your grade values providing you full flexibility on complex jobs.

SECTOR LOCK –BEAM MASKING

Electronically turns off the laser beam in specific quadrants to prevent interference with other crews on the site. Can also be used to avoid shining into a roadway or to avoid reflective surfaces, which may give a false reading.

REMOTE CONTROL

The RG50FA and RG50A optional remote controls provide a range of more than 400 m and 100 m radius. All functions of the laser can be controlled via the remote. Even a reactivation of the rotation following a tilt sensor stop is possible via the remote. Users can easily run several lasers in parallel on the same site by pairing the laser with the remote control.

CONTROL FUNCTION

Equipped with tilt-control function, the Zone50 lasers will be switched off automatically if displaced inadvertently or disturbed significantly by wind. Lower sensitivity settings towards wind & vibrations can be selected to allow continuous operation and are supported by an automatic re-adjustment.

GeoMax Pipe Lasers
Zeta125 Series

With functional and versatile configuration, a full range of features and a tough design, the Zeta series fit all your needs, getting an error-free job done – no matter what the situation or the environmental conditions might be.

ROBUSTNESS
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.

ACCURACY
Error-free work

Pipelaying needs to be exact over long distances so with a guarantee of ± 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
More levelling control

The Zeta series allows you to set the pipe grade from -10 % to +40%.

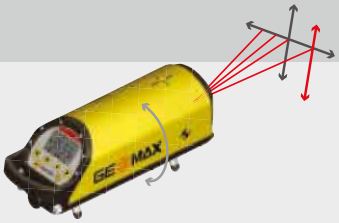
VERSATILE CONFIGURATION
Use in all kinds of spaces and situations

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

Grade range	-10 % to +40 %
Accuracy	±5 mm at 100 m / ± 1/16" at 100'
Temperture drift	± 10 arc sec.; ± .005% 1"/C arc seconds per degree C
Beam Type/Output	Visible laser diode, 635 nm, < 5 mW, 3R class
Protection class	IP68
Power supply / battery life	Li-Ion battery / 40 h

IP68



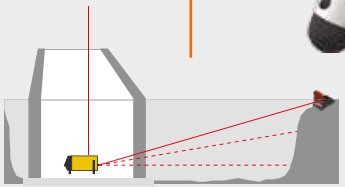
"S" SERIES MANUAL ALIGMENT AND AUTOMATIC DUAL AXIS COMPENSATION

REMOTE CONTROL

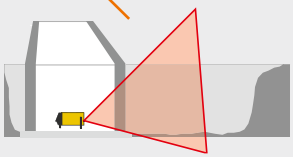
LARGE AND EASY-TO-READ DISPLAY

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.

GEOMAX CABLE LOCATING AND TRACING

Increase on-site safety, minimise human error and save time and money with the GeoMax Cable Avoidance and Tracing systems.

GeoMax Machine Guidance
EzDig Series

Excavator work has always been based on either intuitive guesswork or by using costly and difficult-to-install-and-operate machine control systems. GeoMax EzDig is 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

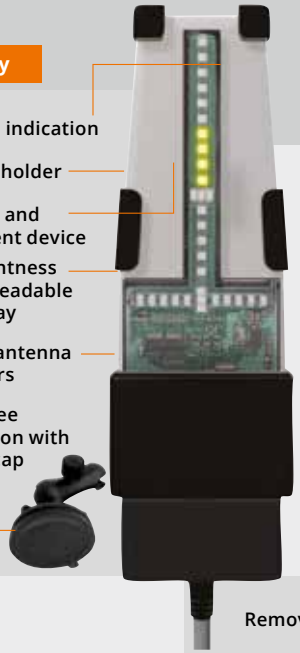
1. No more overcutting, costly fill materials and rework
2. Eliminate checking and installation machine downtime
3. No more time consuming tape measurements
4. Save fuel, time and material

TOUCH control unit

STANDARD control unit

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

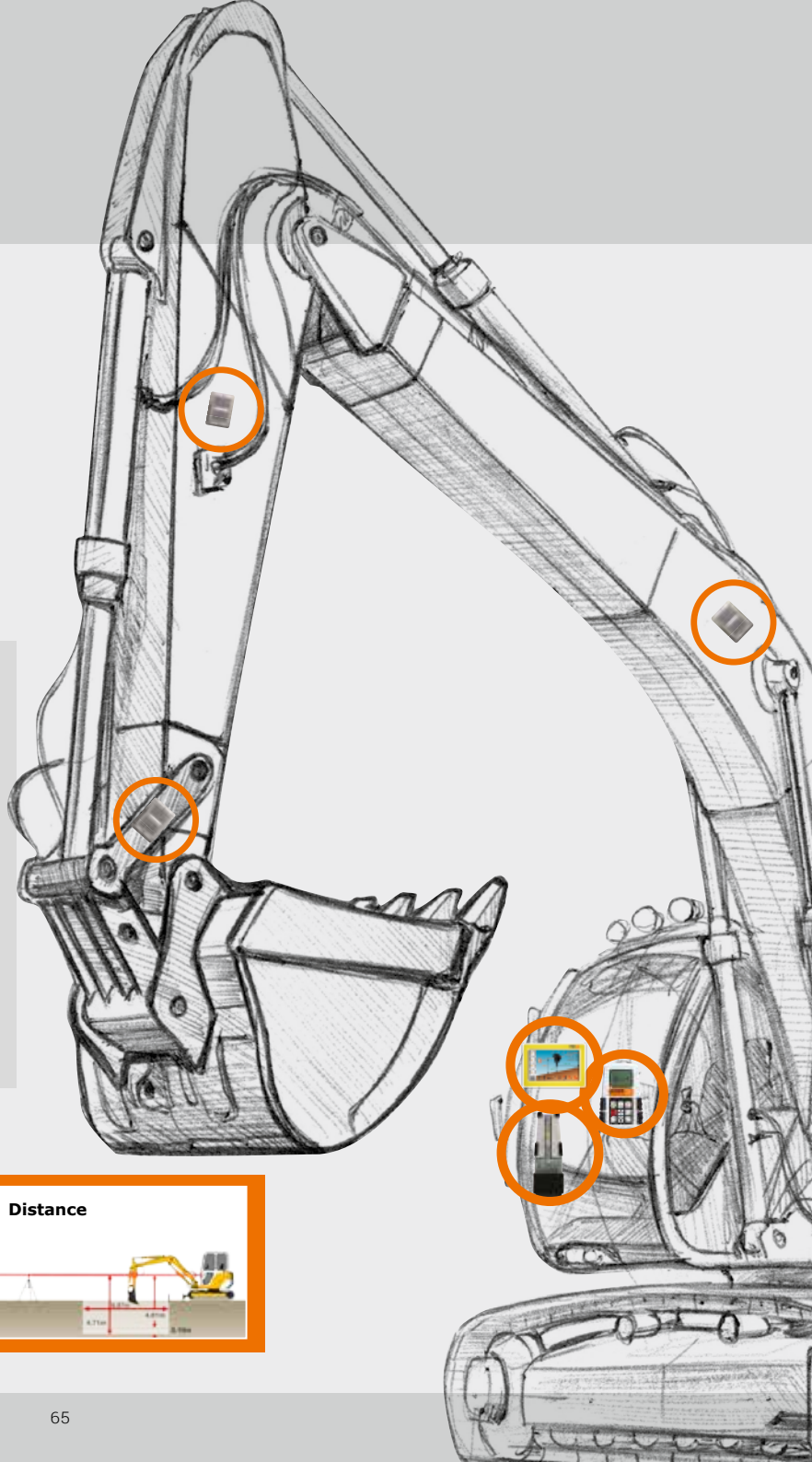
LED display



- 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
- Removal key

Sensors

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



REAL-TIME INDICATION

GeoMax Cable Locating and Tracing
EziSystem

Every year site workers are injured and equipment damaged due to accidently 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 Sotware

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 Cable Locating and Tracing
Ultra System

ULTRA System locators

Easily locate cables and pipes wiht pointpoint accuracy.

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 interferring 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

For all utility locating and tracing

The transmitters are ideally suited for complex and challenging sites conditions. They are lightwieght and have 12 configurable frequencies that perform well tracing over long distances and also for high impedence 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	ULTRA locators
Frequency / Mode	Power 50Hz, 100Hz and 450Hz; Radio 15kHz to 60kHz; Transmitter 512Hz, 314Hz, 8192Hz, 32768Hz, 83.1kHz and 200Hkz; 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	ULTRA Transmitters
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)

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 currect accessories portfolio, ask more 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.

ZTR101
Tribrach without optical plummet, black.

ZTR103
Tribrach with optical plummet, black.

ZCA100
Tribrach carrier for GNSS antennas.

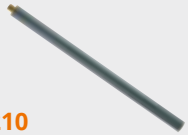
ZCA101
Tribrach carrier with stub for prisms.

ZCA102
Reflector carrier with tubular level and optical plummet, for precise positioning.

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.



ZPC210
GNSS pole, 40 cm, for mounting Zenith receiver on carrier as extension.

ZST100
Telescopic, dual-strut pole support. Suitable for all GeoMax poles and level staffs.

ZHR200
Pole holder for Handheld PS336.

TOTAL STATION, CONTROLLER & DIGITAL LEVEL CABLES

Zipp10 Pro/Zipp20	USB	Cable mini-USB to USB host connecting Zipp10 to a PC/Tablet.	ZDC301
Zoom20/30/35 Pro	RS232	Cable Hirose-RS232 connecting Zoom20/30/35 (Pro) to a PC/Tablet using serial transfer technology.	ZDC100
	USB	Cable Lemo-USB connecting Zoom20/30/35 (Pro) to a PC/Tablet using USB transfer technology.	ZDC217
ZTS600, ZDL700	RS232	Cable Hirose-RS232 connecting ZTS600 & ZDL700 to a PC/Tablet.	ZDC100
	USB	Cable Lemo-USB connecting ZTS600 & ZDL700 to a PC/Tablet	ZDC102

GNSS CABLES

Zenith10/20	USB	Cable Lemo-USB for Zenith10/20 connecting the device to a PC/Tablet.	ZDC222
	RS232	Cable Lemo-RS232 for Zenith10/20 connecting the device to a PC/Tablet.	ZDC220
	Satel EASyPro/battery	Y-Cable Lemo to Lemo and clamps to connect Zenith10/20 with Satel EASyPro radio and external battery for power supply.	ZDC221
Zenith25	RS232	Cable Lemo-RS232 for connecting Zenith25 to a PC/Tablet.	ZDC227
	USB	Cable Lemo-USB for connecting Zenith25 to a PC/Tablet.	ZDC226
	Satel EASyPro/battery	Y-Cable Lemo to Lemo and clamps to connect Zenith25 with Satel EASyPro radio and external battery for power supply.	ZDC225
TNC	TNC	TNC to TNC cable. 2m extension for radio antenna.	ZDC202

GeoMax **Accessories**

GRZ4
360° prism with soft bag.

GRZ122
360° prism with 5/8" for GNSS antenna.

ZDE100/GFZ4
Diagonal eyepiece.

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.

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.

ZPM100
Sliding mini-prism. True 0-constant prism, includes bubble, 4 mini poles and pole tip.

ZTM100
Self-adhesive reflective target 6 x 6 cm. For measurement of surfaces with standard EDM.

ZCB100
Backstrap for hard shell containers.

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

ZCT105
Soft bag for accessories, controllers or tablet PC.

ZCH201
Rapid charger or Li-Ion batteries ZBA200 and ZBA400. Includes car adapter cable.

ZCH202
Dual charger for ZBA202.

ZCM101
Industrial CF-card 256MB.

ZCM04
Micro SD Card 4GB.

ZMC100
The 4 GB USB memory stick is suitable for GeoMax instruments, providing the highest data dependability.

BATTERIES
High output Li-Ion batteries.

ZBA301	for Zipp10 Pro/Zipp20/ZT20 Total Stations, 4.4 Ah
ZBA101	for ZTS600 Total Stations & ZDL700 Level
ZBA201	for Zoom Total Stations and Zenith25 GNSS, 2.6 Ah
ZBA400	for Zoom Total Stations, 4.4 Ah
ZBA202	for Zenith10/20 GNSS, 2.5 Ah
CBA1	for PS336 Dataloggers, 5.6 Ah

GeoMax **Accessories**

Storm ZDD
The digital readout displays the height difference to the laser as soon as it is detected in the 127 mm reception window.

QL314S
A very sturdy receiver with additional display on the back side. Powered by rechargeable NiCd batteries. Protection IP67.

LR 300
Receiver with a 4 cm reception field and adjustable sound volume. Powered by 9V-alkaline.

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

MR360/ MD360
Machine control receivers with separate in-cabin display, connected via radio, powered by built-in rechargeable NiCd batteries – no cables required. Available with clamps or magnets.

MR240
Machine control receiver, fixed with extremely strong magnets. Powered by alkaline batteries (up to 160 h) – no cables required.

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.

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.

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

GeoMax **Product Marketing Material**

A selection of our available marketing material:

Zoom80 Series

Zoom35 Pro Series

Zoom30 Pro Series

Zoom20 Pro Series

Zoom20 accXess

Zipp20 Open WinCE® Series

Zipp10 Pro Series

Zenith25 Pro Series

Zenith10 & 20 Series

Zoom300

PS336

X-PAD MPS

Zone50 Series

EzDig

Ezi & Ultra Systems

FieldGenius

ZDL700 Series

ZAL100 Series

To learn more about us visit:
www.geomax-positioning.com

Works when you do