GeoMax General Catalog

geomax-positioning.com

Visit our website to find your local distributor: geomax-positioning.com

GeoMax, part of Hexagon, provides a comprehensive portfolio for the global construction and surveying market equipment. Our systems include easy-to-use and highly-productive total stations, GNSS instruments, unique software, rotating and layout lasers, optical and digital levels, and accessories. Our portfolio is known for robustness, ease of use and outstanding software designed by and for users in construction and surveying. From our base in Switzerland, our technology is supported by a broad sales, support and service network covering all continents.

At GeoMax we provide a comprehensive portfolio of integrated solutions by developing, manufacturing and distributing quality construction and surveying instruments and software. We address professional as well as occasional users with our extensive portfolio of products.

Being part of Hexagon, a global leader of digital solutions, grants GeoMax access to state-of-the-art development and production facilities throughout Europe, USA and Asia Pacific. Our technology is supported by a broad sales and service network covering all continents and more than 100 branches. Through this continually growing distribution and service network, our products are available worldwide delivering outstanding price-performance ratio.

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. You get a price-to-performance ratio that you need to succeed in your tough business environment.
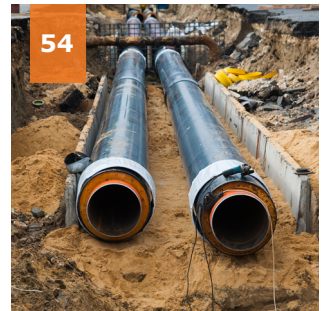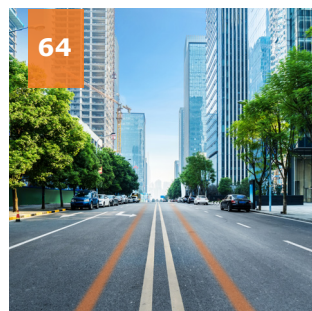
Content

GEOMAX TOTAL STATIONS

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.

GeoMax Zoom90 Series
The ultimate one-man system

STREAM360: FULLY ROBOTIC

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

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

AiM: Aims accurately at any prism, without the need to look through the telescope.Highly reliable measurements are performed automatically and are consistently repeatable.

X-MOTION™ HYBRID DRIVES

The GeoMax Zoom90 incorporates highly innovative X-motion hybrid drives, promoting automation performance compared to conventional drives. It will follow your target at 55 MPH at 350 feet.

NAVLIGHT™

Fitted as standard in the telescope, the NavLight is an efficient alignment aid, helping to speed up work while setting out. Its flashing red and yellow lights will guide you quickly and exactly to the line of sight.

ACCXESS™ EDM TECHNOLOGY

GeoMax's accXess EDM Technology provides leading reflectorless measurements up to 1,000m.

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

OPEN CONNECTIVITY

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

	Scout	TRack	Aim	accXess io	accXess s
Robotic (R)	✓	✓	✓	✓	✓

TECHNICAL DATA	
Accuracy	5", 2", 1"
Prism (range, accuracy)	11,500ft/1mm + 1.5ppm
Prism, long-range (range, accuracy)	>32,808ft/ 5mm + 2ppm
Non-prism (range, accuracy)	3280.8ft/1640.4ft, 2mm + 2ppm*
Scout range	984ft at round prism
TRack range	2625ft at round prism
AiM range	3280.8ft at round prism

GeoMax Zoom70 Series

Your economic choice when price counts as much as performance

ONE MAN TOTAL STATION

Equipped with the long-range Bluetooth® handle, the GeoMax Zoom70 transforms into a true one man total station. It supports the advanced prism search, based on the GNSS position of the controller, mounted on the pole - GeoTRAil. Due to its seamless integration into the X-PAD field software GeoTRAil combines simplicity and high performance.

As there in no need for special, inexpensive, and power consuming devices attached to your prisms, this total station is ideal on the worksite. Zoom70 keeps your pole lightweight and convenient to carry all day long!

FULL CONNECTIVITY

The Zoom70 meets all your connectivity needs. Use its built in Bluetooth® for medium range data transfer or its Bluetooth® handle for highest performance over long distances. Either way, it is ideal for one-man robotic surveys.

Combine your preferred software and data collector to perform remote control tasks with increased productivity. The Windows® CE operating system installed on the Zoom70 allows you to run a variety of powerful field software packages onborad.This provides you the freedom to choose software that best suits your needs.

TECHNICAL DATA	
Accuracy	5", 2", 1"
Prism (range, accuracy)	11,500ft/ 1mm + 1.5ppm
Prism, long-range (range, accuracy)	32,808 ft/ 5mm + 2ppm
Non-prism (range, accuracy)	3280.8ft /500m, 2mm + 2ppm*
TRack range	2625ft at round prism
AiM range	3280.8ft at round prism

* > 1640.42ft/ 4mm + 2ppm

GeoMax X-Pole

When TPS meets GNSS

WORKING SIMULTANEOUSLY WITH TPS AND GNSS

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

The seamless integration of X-Pole into the X-PAD field software allows a toggle between both measurement modes. Simply decide with the press of a button if you want to change from TPS to GNSS mode, such as when some points cannot be measured with TPS due to limited prism visibility. Once those points are measured, switch back to TPS mode.

X-Pole enhances the efficiency of the system since it eliminates the need for cumbersome and time consuming station setups. Zoom70/90`s Track360 functionality enables following a moving prism. In case of loss of lock, the X-Pole solution immediately finds the pole position by obtaining the coordinates from the GNSS receiver mounted on top of the prism.

KEY FEATURES

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

GeoMax Zoom50 Series
Highest performance on every level

SUPERIOR ACCXESS EDM

With the proven accXess technology, the GeoMax Zoom50 features an intelligent distance measurement engine designed for outstanding range, speed and hightest accuracy--even under the tough conditions. The longer measurement range means fewer set ups.

EASY CONNECTIVITY

The Zoom50 manual total station includes an environmentally protected USB port, internal Bluetooth® and a cable connection port. This allows for fast, simple and dependable data transfer between the instrument and your PC or handheld controller using easy-to-connect Plug and Play technology.

COLOR TOUCH SCREEN

The extra-large 3.5" color 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 stakeouts, easier and more productive than ever before.

TECHNICAL DATA	
Hz, V Standard deviation (ISO 17123-3)	1", 2", 5"
Compensator system	Quadruple-axis compensation
Measuring range with prism	32,808.39ft
Accuracy on reflector (Fine/Tracking)	2mm + 2ppm/3mm + 2ppm
Reflectorless range accXess5	>1640.42ft
Reflectorless range accXess10	>3,280.8ft
Accuracy reflectorless	.2mm + 2ppm (>1640.42ft/ 4mm + 2ppm)
Communication	USB, Bluetooth®, USB Host, RS232

GeoMax Zoom50 accXess5

Distance measurement to reflector and 500m reflectorless.

GeoMax Zoom50 accXess10

Distance measurement to reflector and 1,000m reflectorless.
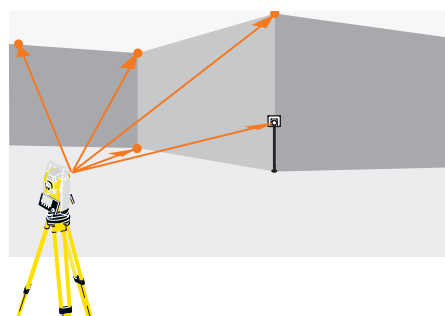
APPLICATIONS

Your Zoom50 total station comes with a complete range of powerful applications:

- Survey and coding
- Set-up with resection
- Set out
- Area 3D and volume
- Remote elevation
- Construction layout
- Reference line
- Reference arc

- Grid setout
- Column offset
- COGO routines
- Missing line measurement
- Two prism offsets
- Road 2D
- Road 3D
- Traverse with on board adjustment

GeoMax Zoom40 Series

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

TOTALLY OPEN WINCE®

The GeoMax Zoom40 is a fully open WinCE® total station that gives you the flexibility to run X-PAD, FieldGenius, Carlson SurvCE, or any custom WinCE® software to personalize your system.

COLOR TOUCH SCREEN

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

FULLY FEATURED

All the openness and connectivity combined with a system offering a color and touch display, neXus5, the long range non-prism measurement, and all your favorite Windows CE® applications makes the Zoom40 the total station that "works when you do."

TECHNICAL DATA	
Hz, V Standard deviation (ISO 17123-3)	2", 5"
Compensator system	Quadruple-axis compensation
Measuring range with prism	11,482.94ft
Accuracy on reflector (Fine/Tracking)	2mm + 2ppm/3mm + 2ppm
Reflectorless range neXus5	1,640.42
Accuracy reflectorless	2mm + 2ppm
Communication	USB, Bluetooth®, USB Host, RS232

GeoMax Zoom40 neXus5

Distance measurement to reflector and 500m reflectorless.

GeoMax Zoom25 Series
If you don`t want to compromise on quality

ON BOARD 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.

NEXUS™ EDM TECHNOLOGY
GeoMax's neXus5 EDM technology delivers high dependability and class-leading accuracy with and without a prism, even under difficult conditions. Reflectorless neXus5 EDM technology supports measurement ranges up to 1,640.42ft.

BUILT FOR ALL ENVIRONMENTS
The GeoMax Zoom25 Series withstands the toughest environments. With the optional polar certification, the Zoom25 is individually tested at −22°F (−30°C). With our extensive factory tests, you can be sure that GeoMax "works when you do."

TECHNICAL DATA	
Hz, V Standard deviation (ISO 17123-3)	2", 5"
Compensator system	Quadruple-axis compensation
Measuring range with prism	11,482.92
Accuracy on reflector (Fine/Tracking)	2mm + 2ppm/3mm + 2ppm
Reflectorless range neXus5	1,640.42ft
Accuracy reflectorless	2mm + 2ppm
Communication	USB, Bluetooth®, USB Host, RS232

GEOMAX ZOOM25 NEXUS5
Distance measurement to reflector and 500m reflectorless.
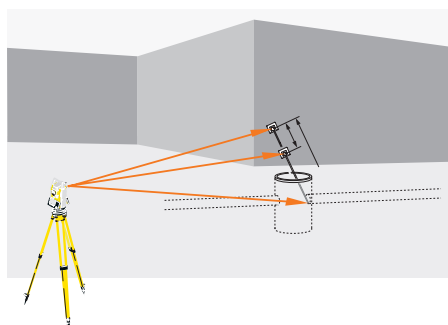
POWERFUL APPS
Every Zoom25 series instrument comes with a complete range of powerful applications:

- Survey and coding
- Set-up with resection
- Set out
- Area 3D and volume
- Remote elevation
- Construction Layout
- Reference line
- Reference arc

- Grid setout
- Column offset
- COGO routines
- Missing line measurement
- Two prism offsets
- Road 2D

GeoMax Zipp10 Pro Series
Your economic choice when price counts as much as performance

EASY CONNECTIVITY
The GeoMax 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 frees you from the need to use any PC.

PERFORMANCE, ROBUSTNESS
Providing a 820.21ft reflectorless measurement range, a long prism range of 9,842.50ft, a coaxial visible laser beam combined with a dust, and water resistant sealed durable housing makes the Zipp10 Pro a top performer in its class.

MULTIFUNCTIONAL KEYBOARD
Featuring an ergonomic full numeric keypad for quick navigation and data entry, that provides direct access to apps and fast navigation. The large high-resolution bright display provides brilliant readability even in strong sunlight.

APPLICATIONS
Every Zipp10 Pro series instrument comes with a complete range of powerful applications:

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

TECHNICAL DATA	
Hz, V Standard deviation (ISO 17123-3)	2", 5"
Range with prism	9,842.50ft
Non-prism range	820.21ft
Accuracy with prism	2mm + 2ppm
Non-prism accuracy	3mm + 2ppm
Measuring time (tracking/quick/fine)	0.33sec/2.0sec/2.4sec
Reflectorless measuring time	3.0 – 6.0sec

GEOMAX ZIPP10 R2
Distance measurement on reflector 250m non-prism distance.

GeoMax Zipp02
Digital theodolite for all your general construction tasks

CLOSING THE GAP

With vertical compensation and 2" accuracy, the GeoMax Zipp02 provides you with the precision required for your most demanding jobs at an affordable price without adding complexity. Various display modes, the ability to 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 your choice when it comes to checking angles, alignments, grade work and short-range leveling.

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

GEOMAX 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 available to increase your productivity and taking your performance to a new level.

GeoMax Zenith35 Pro Series

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

FULL CONNECTIVITY

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

FULL SKY

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

FULL FREEDOM

A corner of a building or even a gully under a parked car? The unique GeoMax Zenith35 Pro Tilt&Go (TAG) functionality allows you to measure points where a plumb pole is not possible, such as house corners.

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

- TAG Single - Measure points with pole tilted up to 15° with only a press of a button.
- TAG Dual - Measure points with the pole tilted up to 30º independent from magnetic field discrepancies.

TECHNICAL DATA	
AdVance® technology	High fix availability + reliability
Channels	555, multi-frequency
Satellite signals	GPS L1,L2,L2C,L5; GLONASS L1,L2,L3*;BeiDou B1,B2,B3** Galileo E1,E5a,E5b, AltBOC,E6**; NOS;WAAS,MSAS,GAGAN, QZSS***
Positioning rate	5Hz, 20Hz****
Accuracy static H/V	3mm ± 0.5ppm (rms)/ 5mm ± 0.5 ppm (rms)
Accuracy kinematic H/V	8mm ± 1ppm (rms)/ 15mm ± 1ppm (rms)

*Glonass L3 will be provided through future firmware upgrade.
**Believed to comply. Subject to ICD description availability. The position accuracies depend on various factors including the number of satellites, geometry, ionospheric, conditions, multipath, etc
***Support of QZSS is incorporated and will be provided through future firmware upgrade when QZSS will be operational.
****Optional for Zenith35 Pro GSM-UHF-TAG

Tilt&Go

GeoMax Zenith15/25 Pro Series
Built to last, built for the future

EXTREMELY RUGGED

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

NOVATEL® ON BOARD

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

Q-LOCK™ TECHNOLOGY

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

TECHNICAL DATA	
Q-Lock™ technology	Lowest noise and multipath mitigation
Channels	120, dual frequency
Satellite signals	GPS L1,L2,L2C; GLONASS L1,L2;BeiDou** B1,B2 (Zenith25), Galileo**, E1, E5b; NOS;WAAS,MSAS,GAGAN,
Positioning rate	5Hz, 20Hz**
Accuracy static H/V	Zenith25 Pro:
Accuracy kinematic H/V	Zenith25 Pro: 8mm ± 1ppm (rms)/15mm ± 1ppm (rms) Zenith15: 10mm ± 1ppm (rms)/20mm ± 1ppm (rms)

Measurement accuracy and reliability are dependent on various factors including satellite, geometry, obstructions, observation time, ionospheric conditions, multipath, etc. Figures quoted assume normal to favourable conditions.
*Opt. for Zenith25 Pro Incl. in Zenith25 Pro[4]
**Opt. for all Zenith25 Pro

GeoMax PicPoint
Your contactless GNSS system

GEOMAX PICPOINT

With GeoMax PicPoint you can easily measure points directly in the field that cannot be measured with conventional GNSS measurements, such as on façade points or objects with restricted access possibility.

PicPoint combines GNSS measurements with images taken from the camera attached to the pole. The innovative X-PAD field software running on an Android™ tablet uses photogrammetric principles to enable a point determination, CAD drawings and various COGO calculations, such as Area and Tie Distance. Of course, measured points are visualized in the image allowing a visual completeness check of your survey directly on site. And if you should ever have missed to measure some points, this can be done easily in the office.

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

KEY SPECIFICATIONS:

- Range: up to 75.45ft
- Accuracy: Relative 2.16in/ Absolute: 1.96in
- Resolution: up to 18MP
- Battery: rechargeable Li-Ion
- Water and Shockproof
- Weight: 0.35lbs

GeoMax GNSS antennas

	ZENITH15	ZENITH25 PRO	ZENITH25PRO[4]	ZENITH35 PRO	ZENITH35 PRO TAG
Measurement Engine					
Channels	120			555	
GPS tracking	L1, L2, L2C			L1, L2, L2C, L5	
GLONASS tracking	L1, L2			L1, L2, L3*	
BeiDou tracking	-	B1 opt.	B1,B2	B1, B2, B3**	
Galileo tracking	-	E1 opt.	E1, E5b opt.	E1, E5a,E5b, AltBOC, E6**	
Positioning rate	5Hz	5Hz 20Hz opt.	5Hz 20Hz opt.	5Hz	5Hz, 20Hz opt.
SBAS	EGNOS, WAAS, MSAS, GAGAN			EGNOS, WAAS, MSAS, GAGAN, QZSS***	
Tilt&Go					
Single/Dual Mode	-			-	Yes
ACCURACY**					
Static H/V (mm + ppm)	5 + 0.5/10 + 0.5	3 + 0.5/5 + 0.5		3 + 0.5/5 + 0.5	
Kinematic H/V (mm + ppm)	10 + 1/20 + 1	8 + 1/15 + 1		8 + 1/15 + 1	
Static long H/V (mm + ppm)	3 + 0.1/3.5 + 0.4	3 + 0.1/3.5 + 0.4		3 + 0.1/ 3.5 + 0.4	
COMMUNICATION					
GSM/GPRS module	3.75G			3.75G	
UHF radio module	500mW, 1000mW; selectable			500mW, 1000mW; selectable	
	Optional	Optional	Included	Included	
Bluetooth®	Yes			Yes	
WiFi	-			Yes	
Remote Configuration via DynDNS	-			Yes	
Communication port	USB, serial and power			USB, serial and power	
INTERFACES					
Data recording	Removable microSD card			Removable microSD card and 4 GB internal memory	
GSM/TCP/IP	Removable SIM card			Removable SIM card	
PicPoint support	Yes			Yes	
X-Pole support	Yes			Yes	
POWER SUPPLY					
Operating time (static/rover)	7.5h/5h	9h/6h	9h/6h	8h/6h	
PHYSICAL SPECIFICATIONS					
Dimensions/Weight	2.36lbs without battery			2.58lbs without battery	
Operating temperature	−40°F to 149°F			−40°F to 149°F	
Protection class	IP68			IP68	
Humidity	100%, condensing			100%, condensing	
Vibration	Mechanical stress resistant according ISO 9022-36-05			ASAE EP455 Section 5.15.1 Random, MIL-STD-810G, method 514.6E-I	
Shock	Withstands 2m drop onto hard surface			Withstands 2 m drop onto hard surface	
Warranty					
Standard Warranty	1 year			1 year	
Extendable warranty	-	Yes	Yes	Yes	

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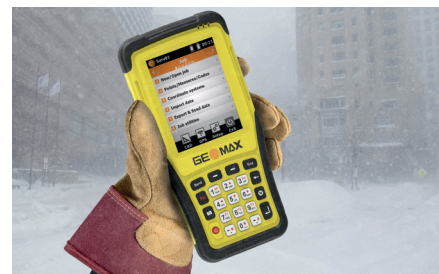
GEOMAX FIELD CONTROLLERS

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

GeoMax Zenius5 W
Versatile field controller

FULLY FEATURED, FULL FLEXIBILITY

The GeoMax Zenius5 W is a versatile handheld fully packed with everything needed to do the job. If you are looking

for flexibility in software and versatility in handling connections to hardware in the field or in the office, this unit is for you.

The on board 5MP camera helps with daily documentation tasks by taking

photos and storing them as notes. This rugged field Windows Mobile® handheld is built to meet GeoMax requirements for power, functionality and reliability, ensuring they always "work when you do."

- Windows Mobile® 6.5 Professional
- Status LED's
- 5MP camera
- Micro SD card
- 72 channel u-Blox GNSS
- WiFi
- Bluetooth®
- Crystal clear display
- Glove-proof keyboard
- Smart battery
- RS232 port
- USB OTG port

X-PAD

TECHNICAL DATA	
Channels	72 channel u-Blox
Satellite signals tracked	GPS, GLONASS, BeiDou, Galileo; single frequency
RTK accuracy	2.5m CEP (Auto.)/2.0m CEP (SBAS)
SBAS	WAAS/EGNOS/MSAS/GAGAN
Operating system	Windows® embedded handheld 6.5 Professional
Memory	512MB program memory, 8GB storage capacity, MicroSD card slot

TECHNICAL DATA	
USB	Mini waterproof USB connector
Wireless	Integrated quad-band GSM/GPRS, phone function
Bluetooth®	Bluetooth® V2.1 support EDR
Wi-Fi	802.11 a/b/n Wireless LAN
Cellular	3.75G cellular modem
Camera	AutoFocus 5MP
Power	up to 10 hours

GeoMax Zenius8
Rugged Windows Mobile® & Android™ field controller

POWERFULL AND ROBUST

The GeoMax Zenius8 is a premium class field controller with unmatched user friendliness, class leading performance, and the highest flexibility and ruggedness. Due to its capability to mount a high performance long range Bluetooth® cap, it is the ideal device to control the GeoMax Zoom90 robotic total station in one-man operation.

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

KEY FEATURES:
- Flexible operating system concept
  Windows® embedded handheld 6.5 professional
  Android™ 4.2.2
- GeoMax customized operating system, for perfect match with GeoMax software and hardware
- 4.7" wide VGA display
- 8 megapixel camera for geo-tagged site documentation
- Large memory - 1GB RAM, 4GB storage
- MicroSD card support
- RS232, USB, Bluetooth® and WiFi connectivity for maximum flexibility
- Built in 56 channels multi constellation GNSS
- Light weight – 1 lb including battery
- Rugged
  - IP67 dust and waterproof
  - Vibration resistant according MIL standard

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

GeoMax Field Controllers

	ZENIUS5 W	ZENIUS8
Primary use case	GNSS/TPS	Robotic TPS
Processor Speed	1GHz	1.5GHz
Operating system	Windows Mobile®	Windows Mobile® & Android™
Screen size	3.7″	4.7″
USB Host port	Via Adapter	Yes
Camera resolution	5MP	8MP
Camera flash	–	Yes
Hot swappable batteries	–	Yes
Env. Protection (IP)	65	67
Rain/wet mode	–	Yes
Weight (incl. battery)	1.3 lbs	1 lb
Int. Memory - RAM	512MB	1GB
Int. Memory - Storage	8GB	4GB
Battery lifetime	8.5h	7.5h
Smart battery	Yes	–
GSM	3.75G	–
GNSS channels	72	56
Max. Bluetooth® range*	Up to 800m	> 600m (with LRBT cap)
GNSS constellations	GPS/GLO/BD	GPS/GLO/SBAS/QZSS
Warranty	1 year	1 year

* Optimal conditions, free line of sight

Juniper Systems Mesa 2
Fully rugged tablets to support the most severe weather conditions

CONNECTIVITY AND PERFORMANCE

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

YOUR OFFICE ANYWHERE

Running Windows® 10 and Android™ 5.1, the new Mesa 2 rugged tablet brings powerful functionality to your mobile data collection, featuring a vast, 7", extra bright display for easily viewing maps or large images, all day battery power, lasting up to 15 hours, and of course, the unmatched ruggedness that Juniper Systems is known for.

FULLY RUGGED

This tablet does not need to hide outdoors. Its multi-touch and sunlight-viewable screen allows you to interact with it, without even taking off your gloves. Since accidents in the field can happen, this tablet is shock resistant (MIL-STD-810G) and water and dust proof (IP68).

	MESA 2 STANDARD	MESA 2 GEO CELL
Mobile computing platform	Quad-core Intel®. Atom™ Z3745 processor	Quad-core Intel®. Atom™ Z3745 processor
Operating system	Windows® 10 or Android™ 5.1	Windows® 10 or Android™ 5.1
RAM	4GB	4GB
Camera	2 MP front/8 MP rear	2 MP front/8 MP rear
Features	WIFI, Bluetooth® USB, Docking Port	WIFI, Bluetooth®, USB, 4G LTE, High Perfomance GNSS receiver, Docking Port, Extended Battery
Display	Extra-large 7" HD display (1280x720), with high sunlight readability and glove proof operation Capacitive touch screen with rain and snow modes, chemically strengthened Dragontail glass	Extra-large 7" HD display (1280x720), with high sunlight readability and glove proof operation Capacitive touch screen with rain and snow modes, chemically strengthened Dragontail glass

GEOMAX SOFTWARE

All GeoMax software is developed to make your daily work easier and flexible. Highly innovative content, as well as, simple and intuitive interactions with the system.

GeoMax X-PAD Ultimate
The Ultimate solution in the field

X-PAD Ultimate is a tailored, flexible, modular, ideal, customized software for high end topographic tasks, such as measure, stakeout, cadastral, BIM check and control, roading, mapping, bathymetry and GIS. Running on Android, it brings the best technologies to topography.

X-PAD Ultimate ensures productivity in the field and provides perfect integration between measuring tools. X-PAD Ultimate is specifically tailored for users and has the right modules and language for surveyors and construction experts, as it is split in two modules: Survey and Build.

TOPOGRAPHIC 3D CAD
X-PAD Ultimate includes a real topographic 3D CAD, not just a simple graphic viewer, with specific functions to draw, edit, measure and calculate the position of new elements that can be then used in stakeout operations.

MAPS, WMS AND OFF-LINE
X-PAD Ultimate allows you to use different types of standard maps, but also Web Map Service (WMS) maps; off-line mode is also supported.

DATA COLLECTIONS. NOT ONLY COORDINATES
Measuring the position of the points is the main purpose of topographic equipment, but with X-PAD Ultimate you go further because you can integrate the position, photos and notes.

Quick Codes allow you to create your own custom panels with the most used codes and measure the position of the point automatically- all you have to do is choose the code.

STAKEOUT… WITH YOUR EYES CLOSED
With X-PAD Ultimate, stakeout has never been easier or faster. Voice guidance allows you to arrive at the point without even looking at the display while the large compass simplifies visual navigation. Every drawing element, including points, lines, arcs and every position within the graphical view can be staked out.

X-POLE: ONE POLE, TWO SYSTEMS
The X-Pole solution allows you to work simultaneously with TPS and GNSS using the best features of each system and with maximum flexibility. A simple tap is all you need to change the measurement mode and switch from GNSS to TPS mode and vice versa. The GNSS receiver mounted atop the prism, gives the total station a precise position, speeding up the prism acquisition after loss.

AUGMENTED REALITY. TURN ON REALITY!
Point the camera to the site and immediately see where the points and elements are for stakeout. X-PAD Ultimate will guide you in the vicinity of the point and then determine the exact location, but you can also use augmented reality to see your design elements overlayed in the real world.

TERRAIN SURFACES AND VOLUMES
With the Volumes features, X-PAD Ultimate can calculate terrain models from the points with the options to define breaklines and boundaries. From the models, you can go to the volume calculation to determine at a glance the cubic yards of an excavation or a pit. You can also import models from DXF or LandXML files. Using the stakeout commands and a surface, you can check grade to design elevations in the field..

BIM: MODEL REALITY
With BIM, IFC files can be loaded, displayed in the main CAD view and also in survey, stakeout and COGO commands. Elements can be selected, hidden or isolated. From BIM models, it is possible to extract points, lines, surfaces and cross-sections for stakeout and checking operations.

CLOUD AND SHARING POINT.
FIELD AND OFFICE, ALWAYS CONNECTED
With X-PAD Ultimate you can open and import any file, even if it is in the cloud. You can save your data on the most popular cloud platforms, like Google Drive, Microsoft OneDrive and Dropbox, and access from the field or office. You can also share information and coordinates of the measured points quickly via a message or email with photo attached to those in the office waiting for the coordinates of a point.

ROADING. THE WHOLE PROJECT IN THE CONTROLLER
The Roading feature allows you to load, manage and perform alignment stakeouts of works such as roads, highways and canals. The management is fully visual, so you always know what you're doing. At any moment, you can see plans, vertical profiles and cross sections.

You can stake all elements of the work (edges, sideslopes, walls, ditches, etc.) at any station and with any offset, using the cross sections, the edge polylines or by defining one or more sections template.
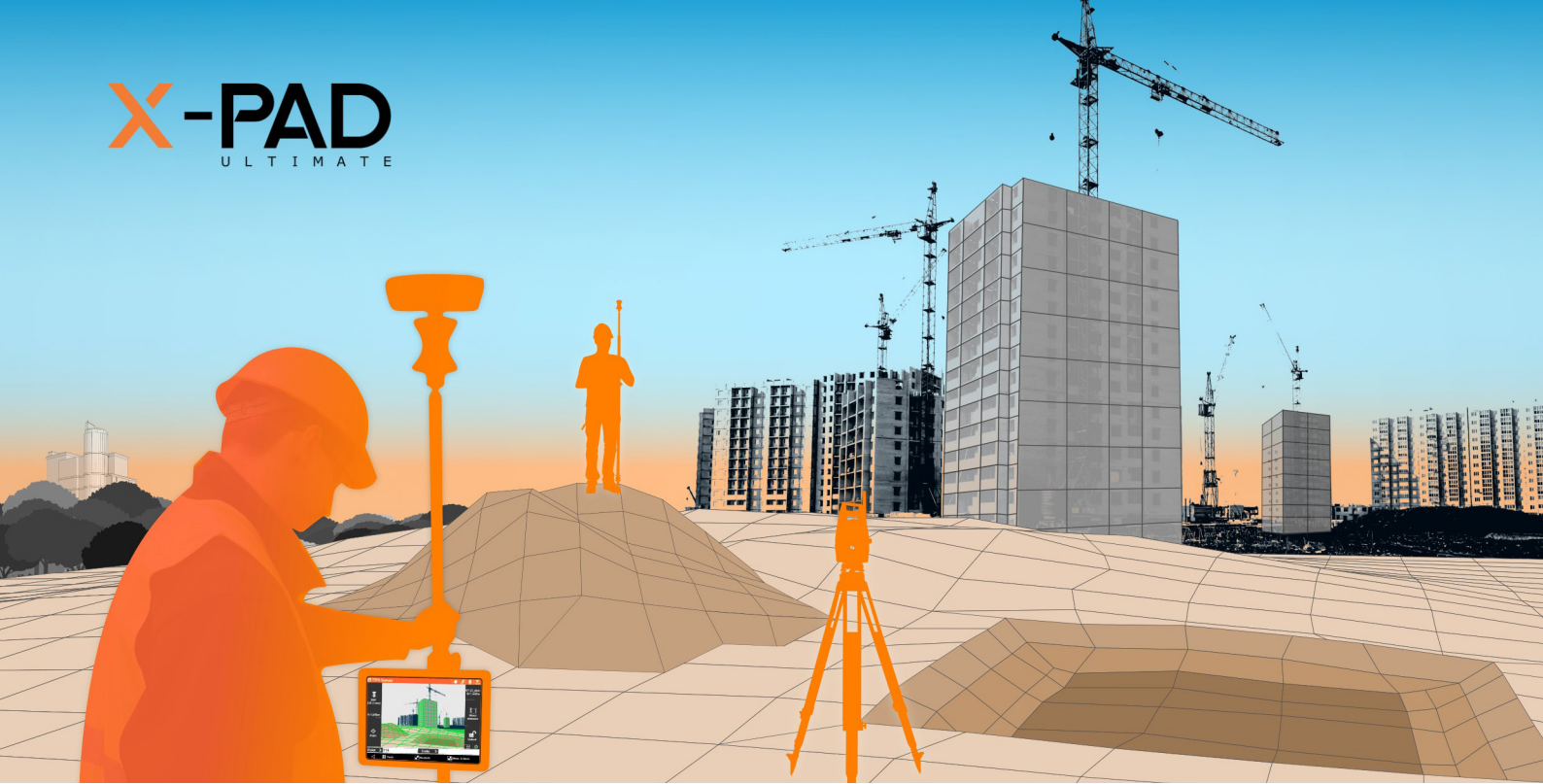
Survey
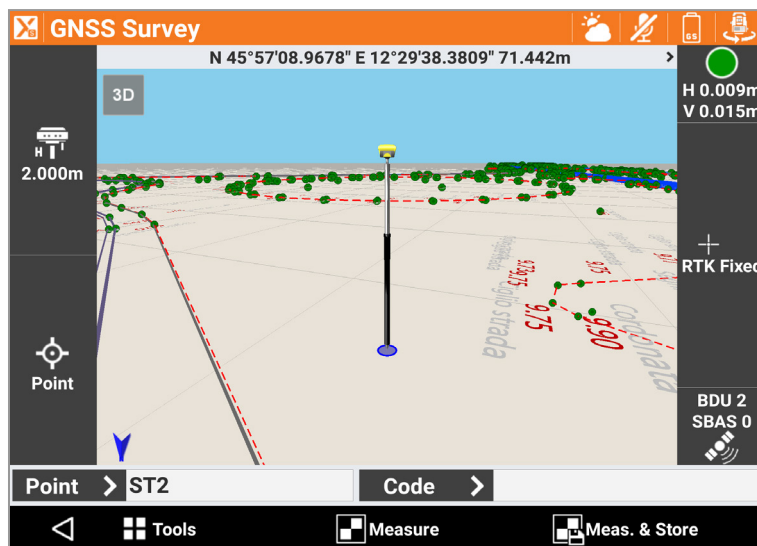
X-PAD Ultimate Survey is the best solution for all your design suvey, property survey and layout needs. It combines data collection from all GeoMax sensors, including total stations, GNSS, locators and levels. Providing you with a a set of complete features, flexibility, data intergration, scalability and the latest technology in the field. With a set of different modules, X-PAD Ultimate Survey covers all the needs in the field using TPS and GNSS measure tools.

Build
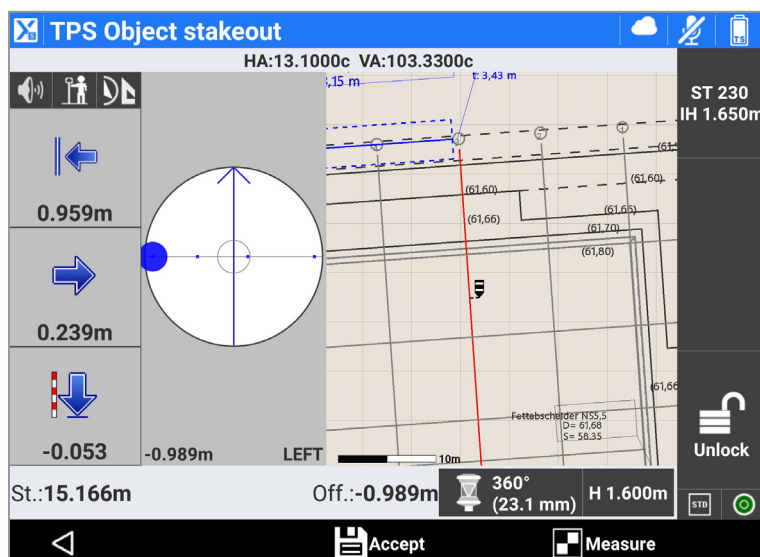
X-PAD Ultimate Build is the ideal solution for all your construction measuring and layout needs - executing all construction activities in an efficient and productive way. It combines data collection from the total station or GNSS, allowing you to perform the measurement, stakeout and as-built with simple and functional procedures. Continuous improvements and developments are made working closely with users in the field.

Specific functions, derived from the experience in the field alongside construction professionlas, make X-PAD Build an indispenable tool in all construction activities. The different mode of the TPS as a reference axis, intersection of two axes and batter boards, make it possible to proceed with tracking operations even in difficult conditions and with few reference points.
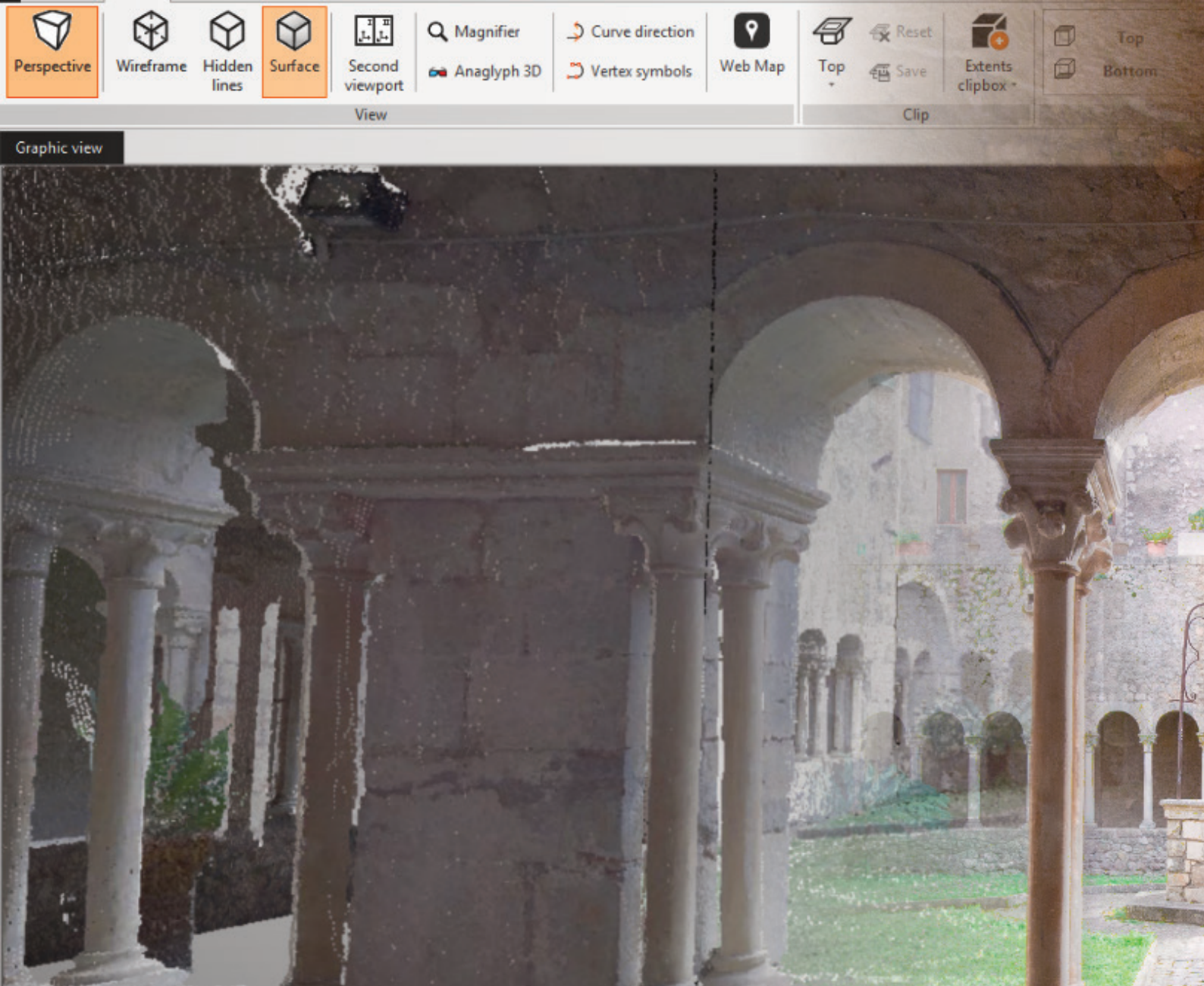
GeoMax X-PAD Office Fusion
The geospatial data office software

GeoMax X-PAD Office Fusion is a new concept with real integration of different information. Experience easy import of data, calculations, adjustments, scan registration and management of the clouds, points, measures, surfaces, BIM models, drawing and images, topographical utilities, and drawing functions - all in one.

X-TOPO: THE TOPOGRAPHIC MODULE
X-TOPO module allows you to import the measurements from your instruments and to have the full control of all the information to verify he quality of your work at any time. It calculates and solves all kinds of surveys, GNSS, total station, digital level and mixed with the least squared algorithms for precise calculation.

From topographic points or point clouds it is possible to create 3D models, contour lines, calculate cross-sections and volumes using several methods. Powerful tools and options allows you to customize the final drawings to obtain the best results possible for you customers.
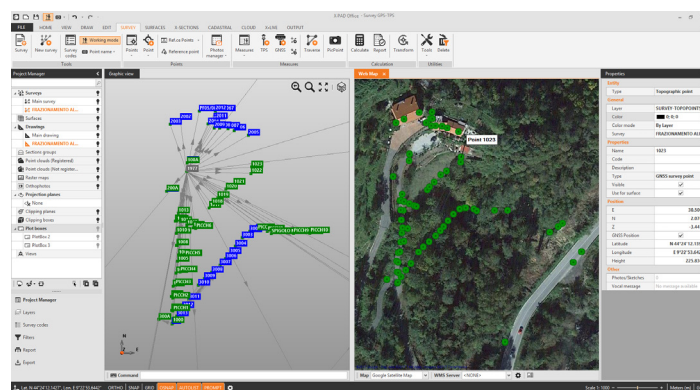
BIM CONNECT MODULE

Efficiently load and manage IFC files, extract elements for stakeout, and check as-built data with field measurements

X-SCAN: THE POINT CLOUDS MODULE

X-SCAN module allows to manage your point clouds data. Robust algorithms are able to process point clouds and return the best results considering all the scans as a whole. Several options allows to improve the results according to the specific type of work and target recognition offers another way to have faster and better results. The automatic registration module is an irreplaceable tool that generates the final results with one single click. Orthophoto, cross-sections and surfaces can be generated them with very few and intuitive steps.
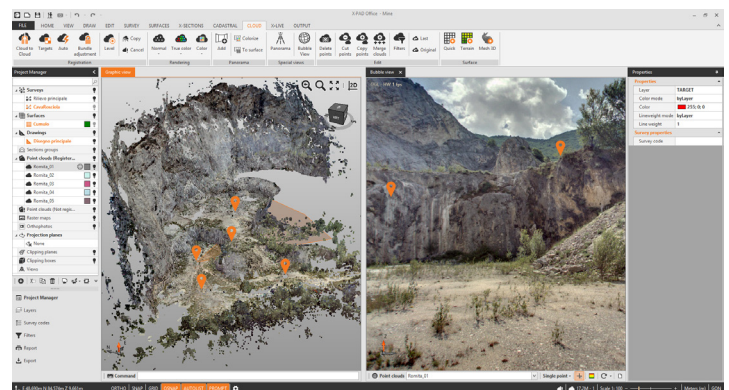
GeoMax X-PAD CalMaster
Calibrate your lasers efficienlty with CalMaster

NEW BUSINESS OPPORTUNITIES

The GeoMax X-PAD CalMaster enables you to offer the complete construction laser package to customers and solidify your professional reputation. Opening new value-added streams of service revenue, you can significantly reduce downtime with your own inhouse calibration capability.

MAKE LIFE EASIER

Laser calibrations have never been that easy and fast to do. X-PAD CalMaster users can reduce their calibration time significantly by using the system for the construction tools laser calibration. It enables a highly accurate method to calibrate lasers and can be operated without the need for extensive training.

COMPLETE THE SYSTEM

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

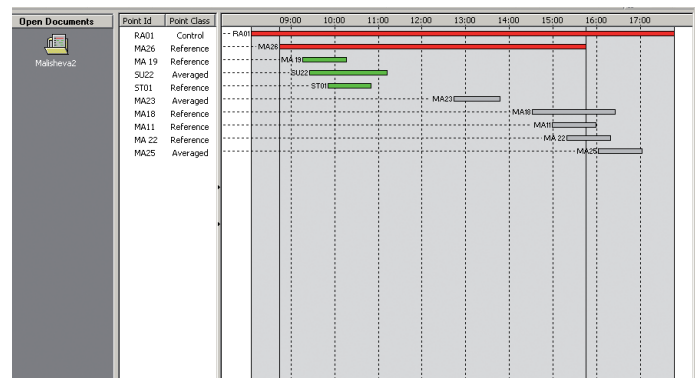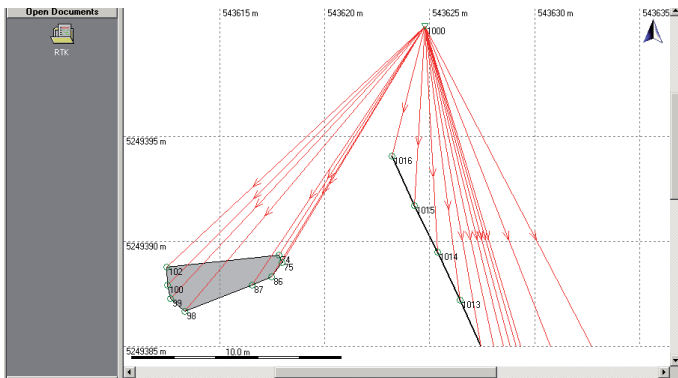|	GEOMAX ZONE SERIES	GEOMAX PIPE LASERS	3RD PARTY LASERS	3RD PARTY PIPE LASERS	3RD PARTY LINE/ POINT LASERS
Issue calibration report	✓	✓	✓	✓	✓
Check plane laser beam	✓		✓		✓
Check spot beam	✓	✓	✓	✓	✓
Check grade 0.5%	✓		✓		
Check grade 1.0%	✓	✓	✓	✓	
Check grade 1.5%	✓		✓		
Guided calibration	✓	✓			
Live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

(including red, green and infrared lasers)

GeoMax Geo Office (GGO)
The ideal companion for your GeoMax equipment

EASY-TO-USE
Following Microsoft Windows® standards, GeoMax Geo Office (GGO) is easy to use, even for novice PC users. Through the use of icons and graphics working with data in GGO is as easy as point and click.

RINEX IMPORT/EXPORT
Support of GNSS processing using multiple sensor brands is assured thanks 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, VISUALISE, EDIT
GGO has a full suite of tools that allow you to get the most out of your equipment before going on-site. Once you've completed your survey and seamlessly imported your field results into GGO, all observations are immediately available for visual confirmation of field activities. If errors or changes are found, they can be easily edited to deliver perfect results.

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

LEAST SQUARES ADJUSTMENT
A rigorous 3D least squares adjustment package is available. This option allows the adjustment using least squares of GNSS, total station and combined data by using a variety of different parameters and coordinate systems. The results are stored in well-designed HTML report.

GeoMax FieldGenius Premium
Powerful field software for all your daily surveying
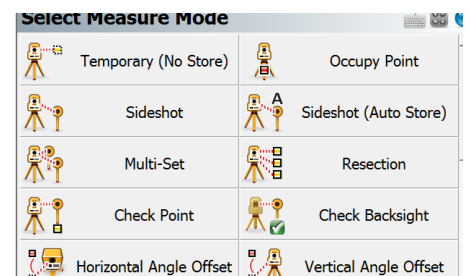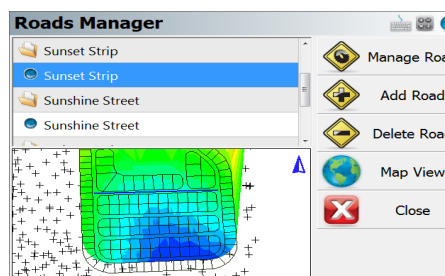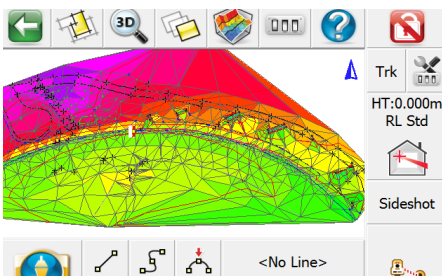
DIGITAL TERRAIN MODELING, VOLUMES AND CONTOURING
FieldGenius has the ability to create and utilize DTM surfaces from existing survey data or create a DTM in real time as the data is collected. The TIN and contours will automatically update with each new shot.

POWERFUL ROADING
FieldGenius roading allows you to manually input or import your alignment data including centre line, 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.

GEOMAX MICRO ROBOTIC SOLUTION WITH MASTERPLAN

The GeoMax Zoom3D and X-PAD MasterPlan software are your perfect partner for measurement and layout applications, indoors and outdoors.
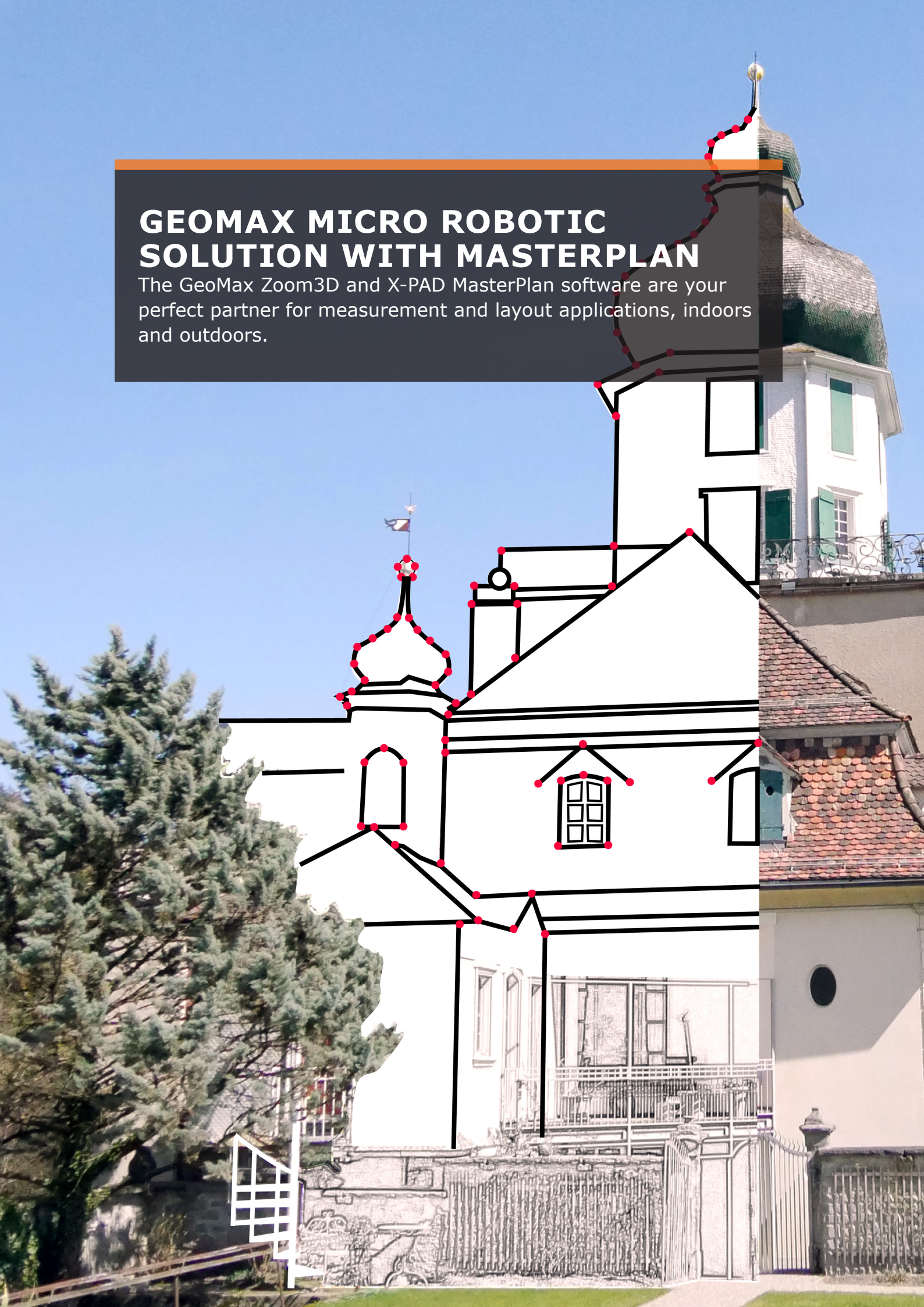
GeoMax Zoom3D
Micro Robotic Solution with MasterPlan

Measurements and setup have never been so simple and fast. With an easy setup, the intuitive GeoMax X-PAD MasterPlan Android™ software and one-man operation, the Zoom3D will speed up your daily work indoors and outdoors and bring the plan into the field.

X-PAD AND ZOOM3D – YOUR PERFECT SYSTEM

X-PAD is known for its user friendliness and it's simple setup. X-PAD MasterPlan has been specifically designed to make the work with the Zoom3D as easy as possible and help professionals to modernize their business and improve their workflow efficiency.

With just a few steps, you are ready to measure. No matter day or night, targeting on hidden points, or over short or long distances up to 150ft, the Zoom3D offers many intelligent features to target the points you are aiming at precisly.

Tap the measure button and the point is measured and visualized on your screen.

ONE-MAN LAYOUT

Increase your efficiency and increase productivity in your daily tasks. X-PAD MasterPlan includes an easy to use, but powerful stakeout tool for the site layout. X-PAD MasterpPlan features target recognition technology, automatically aiming and tracking the target mounted on a pole.

Easy leveling, plumbing points and staking out: the Zoom3D's unique and user-friendly on board software comes with a full set of features that will speed up your outdoor and indoor applications.

AS-BUILT AND DRAWING IN ONE STEP

X-PAD MasterPlan features a full range of drawing tools. These features allow you to draw the 3D environment in the field quickly and easily. Results can be exported in DXF or ASCII format. Draw 2D and 3D elements with the best results using the X-PAD MasterPlan. Get fast and exact results and all at the best price to performance ratio.
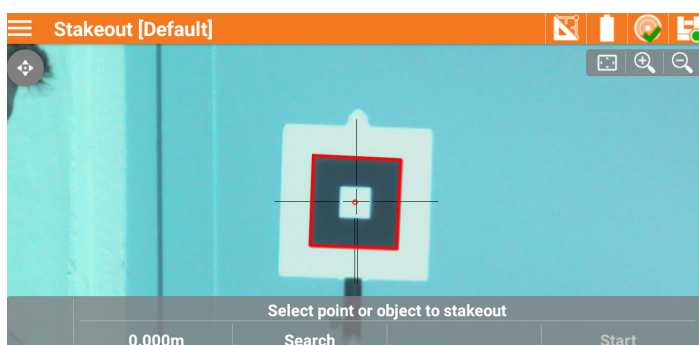
AUTOMATIC LINE AND SURFACE SCANS

When geometry becomes complex and surfaces are curved, Zoom3D measures horizontal, vertical and sloped sections automatically.

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

GEOMAX LEVELS

GeoMax levels make it easy to complete your daily leveling tasks on time with the highest accuracy. Rely on their comfort and robustness when working indoors or outdoors, even under challenging weather conditions.

GeoMax ZDL700 Series

## A digital level offering accurate results and fast operation

QUICK, EASY AND ERROR-FREE

Combining the quick measurement speed and the simplicity of a one-push measure and store function, the ZDL700 provides a faster and economical workflow.

LEAVE THE CALCULATOR IN YOUR POCKET

Execute all kinds of calculations with GeoMax ZDL700. It is equipped with an onboard adjustment program, height difference calculations, an inverse staff measuring mode, and various measuring configurations. Thanks to digital readings and automated calculation, you will never again be slowed down by time consuming calculator use.
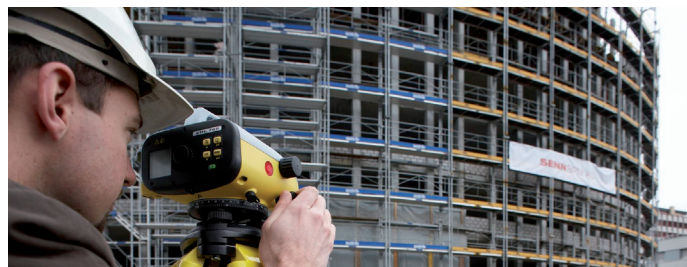
ACCURATE

Extensive field tests verify the excellent accuracy of the ZDL700 of .027 in (0.7 mm) for .621 miles (1 km) double-run level. This makes the ZDL700 an ideal level for general construction with high order leveling, deformation measurements and precise surveying.

TECHNICAL DATA	
Height accuracy	± .027in/mile double run
Distance accuracy	D < 32.80 ft, .393 in D ≥ 32.80 ft, 0.001 x D
Maximum range	344.48 ft
Single measurement speed	< 3 seconds
Internal memory	2,000 measurements

GeoMax ZAL Automatic Level Series
Automatic levels covering from beginner to expert

Total Care SHIELD

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

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

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

GeoMax ZAL300 Series
Professional/high precision

GeoMax ZAL200 Series
Professional/standard tasks

GeoMax ZAL100 Series
Economic choice/occasional use

TECHNICAL DATA	ZAL330	ZAL328	ZAL324	ZAL320	ZAL232	ZAL224	ZAL220	ZAL132	ZAL124	ZAL120
Accuracy Standard deviation 1km double-run levelling	1.2mm	1.5mm	2.0mm	2.5mm	1.9mm	2.0mm	2.5mm	2.0mm	2.0mm	2.5mm
Image	Erect	Erect	Erect	Erect	Erect	Erect	Erect	Erect	Erect	Erect
Magnification	30 x	28 x	24 x	20 x	32 x	24 x	20 x	32 x	24 x	20 x
Shortest target distance from instrument axis	0.8m	0.8m	0.6m	0.6m	1m	1m	1m	1m	1m	1m
Multiplication factor	100	100	100	100	100	100	100	100	100	100
Compensator working range/ setting accuracy	± 15'/0.3''	± 15'/0.3''	± 15'/0.5''	± 15'/0.5''	± 15'/0.5''	± 15'/0.5''	± 15'/0.5''	± 15'/0.5''	± 15'/0.5''	± 15'/0.5''
Circular level sensitivity	10'/2mm	10'/2mm	10'/2mm	10'/2mm	8'/2mm	8'/2mm	8'/2 mm	8'/2mm	8'/2mm	8'/2mm
Protection	IP57	IP57	IP57	IP57	IP56	IP56	IP56	IP54	IP54	IP54

GEOMAX ROTATING LASERS

Suitable for a wide range of applications, GeoMax rotating lasers are true multi-purpose tools.

GeoMax Zone Series
From start to finish, covering every need

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

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

IP68/67 PROTECTION

OUTSTANDING PRICE-TO-PERFORMANCE RATIO

ERROR-FREE RESULTS

DEPENDABLE IN ANY ELEMENT

3/5 YEARS WARRANTY

INTERCHANGEABLE ACCESSORIES

LONG-LASTING OPERATION

SOLID-BUILT DESIGN

GeoMax Zone60 DG
Fully-automatic dual grade laser

TECHNICAL DATA	
Functionality	Self-leveling horizontal, vertical, digital slope in dual axis (full-automatic), Beam catch and Lock function
Operating range (diameter)	900m/3000ft
Self-levelling accuracy	± 1.5mm at 30m (±1/16" at 100ft)
Self-levelling range	± 5°
Grade range	Up to 15%
Rotation speed	300, 600rpm
Laser diode type/class	635nm (visible)/class 1
Batteries type	Li-Ion
Battery life	> 40h
Operating temperature	-4°F to 122°F
Protection	IP67
Warranty	5 years

The Zone60 DG is a fully-automatic grade laser up to 15% slope in both axes specifically designed for construction workers who need the dependability and high accuracy. Align and monitor the laser plane automatically by using the GeoMax ZRD105B receiver.

5 YEARS PREMIUM WARRANTY

GeoMax 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.

TECHNICAL DATA	
Functionality	Self-leveling horizontal, digital slope in dual axis (semi-automatic)
Operating range (diameter)	900m/3000ft
Self-levelling accuracy	± 1.5mm at 30m (±1/16" at 100ft)
Self-levelling range	± 5°
Grade range	Up to 15%
Rotation speed	300, 600rpm
Laser diode type/class	635nm (visible)/class 1
Batteries type	Li-Ion
Battery life	> 40h
Operating temperature	-4°F to 122°F
Protection	IP67
Warranty	3 years

GeoMax Zone40 H
Best construction site rotating laser

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

TECHNICAL DATA	
Functionality	Self-levelling horizontal, manual slope in dual axis,
Operating range (diameter)	900m/3000ft
Self-levelling accuracy	± 1.5mm at 30m (±1/16" at 100ft)
Self-levelling range	± 5°
Grade range	-
Rotation speed	600rpm
Laser diode type/class	635nm (visible)/class 1
Batteries type	Li-Ion
Battery life	> 40h
Operating temperature	14°F to 122°F
Protection	IP67
Warranty	5 years

5 YEARS PREMIUM WARRANTY

GeoMax Zone20 H
Automatic entry level otating laser

Economic and firm entry level rotating laser, the GeoMax Zone20 H is designed with a solid-built housing and a straightforward interface. This laser offers all functions needed for regular and flexible use.

TECHNICAL DATA	
Functionality	Self-leveling horizontal, manual slope in dual axis
Operating range (diameter)	900m/3000ft
Self-levelling accuracy	±2.2mm at 30m (± 3/32" at 100ft)
Self-levelling range	±5°
Grade range	-
Rotation speed	600rpm
Laser diode type/class	635nm (visible)/class 1
Batteries type	Li-Ion
Battery life	> 40h
Operating temperature	14°F to 122°F
Protection	IP67
Warranty	3 years

GeoMax Zone20 HV
Automatic multipurpose rotating laser

TECHNICAL DATA	
Functionality	Self-leveling horizontal, vertical, 90° manual slope in dual axis
Operating range (diameter)	900m/3000ft
Self-levelling accuracy	±2.2mm at 30m (±3/32" at 100ft)
Self-levelling range	±5°
Grade range	-
Rotation speed	120, 300, 600rpm
Scanning modes	10° - 35°
Laser diode type/class	635nm (visible)/class 2
Batteries type	Li-Ion
Battery life	> 40h
Operating temperature	14°F to 122°F
Protection	IP67
Warranty	3 years

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

GEOMAX PIPE LASERS

Consistent precision and accuracy are ensured by the compact, robust and fully featured GeoMax pipe lasers.

GeoMax Zeta125 Series
Versatile configuration, a full range of features, and a tough design

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

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 percent, Zeta pipe lasers let you work close to error free.

In addition to the accurate leveling core, Zeta125s model features active cross axis compensation for any possible setup mistake.

SELF-LEVELING
Set the pipe grade from -10 percent to +40 percent.

VERSATILE CONFIGURATION
The GeoMax Zeta125 fits in tight bends and narrow manholes. Its slim build makes it suitable for pipes as small as 4.92 inches in diameter and the Zeta feet ensure users continue working in most any site situation.

"S" Series manual alignment and automatic dual axis compensation

Pivot point and 5/8" thread

Large and easy to read display

Remote control

Robust and waterpoof

"S" Series autotarget system and vertical level

-10% to +40% Inclination angle

THE SMALLEST DIAMETER

The Zeta125 fits in tight bends and narrow manholes. Due to its slim housing, it is suitable for pipes with 5 inches in diameter. Thanks to its weight and the rubber feet, Zeta pipe laser series has a stable stand on any pipe material.

5"   6"   8"   10"

TECHNICAL DATA	ZETA125	ZETA125 US	ZETA125S
Self-levelling/grade range	+45% to -15%/+40% to -10%		
Accuracy	±5mm at 100m (± 1/16" at 100') ; ± 10 arc sec.; ± .005%		
Cross axis levelling	Manual		Automatic (6°)
Vertical level/Autotarget/Manual alignment	-	-	✓
Laser Class	2	3R	3R
Protection class	IP68		
Power supply/battery life	Rechargeable lithium ion battery pack; 110/230V AC converter (charge and run simultaneously); 12V power cord/40h Li-Ion battery		

GEOMAX MACHINE GUIDANCE

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

GeoMax EzDig Series
The easy and accurate way to guide excavators

The new GeoMax EZDig S and T excavator guidance systems offer the easiest calibration and equipment operations available on the market – and at an affordable price. The EzDig excavator guidance systems "works when you do!"

BENEFITS
- No more overcutting, costly fill materials and rework
- Eliminate checking and installation machine downtime
- No more time consuming tape measurements
- Save fuel, time and material

TECHNICAL DATA	EZDIG STANDARD	EZDIG TOUCH
System power	12/28V	
Angle sensor Battery charger Dimension and weight Protection	Solar 2.75"x3.93"x.78"; .002lbs IP67 Water and dust	
Control unit Screen size and resolution	Digital 2.6" (10cm) 128x64 pixels	Touch 7" (18cm) 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)	

Touch control unit

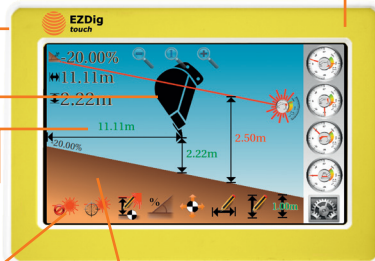Calibration storage 100 machines/10,000 buckets

Optional 2D sensor

Intuitive graphic representation

7" color and touch screen

Functions at your fingertips

Video integration for help and FAQs

Standard control unit

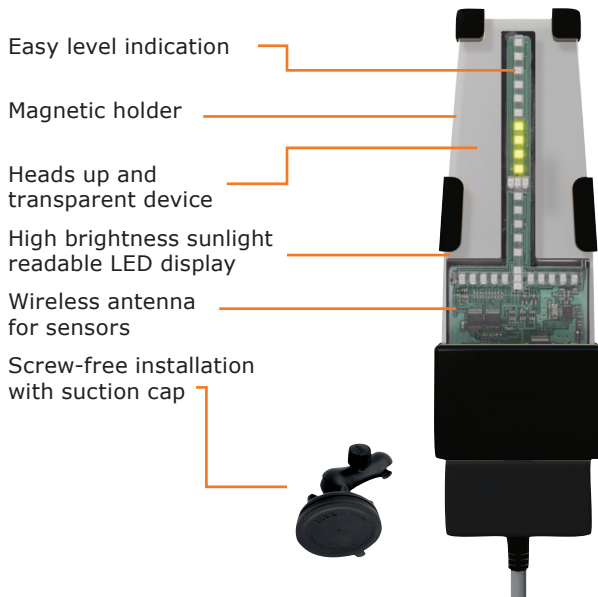5 machines/150 buckets calibration storage

Rugged and compact design
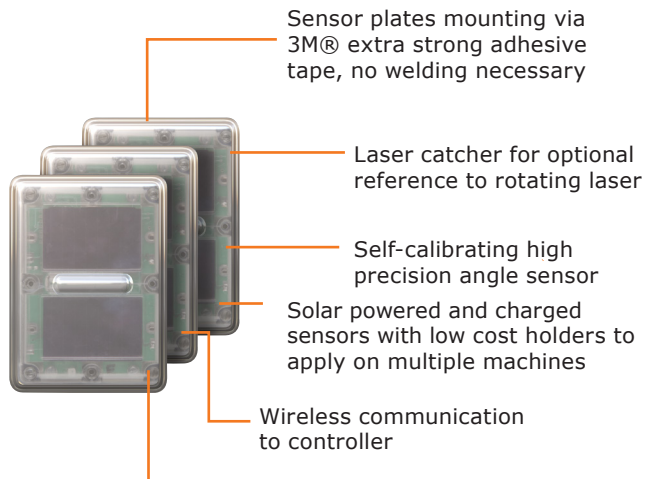
One push button for fast access to all functions

Easy to understand and functional icons

LED display

Easy level indication

Magnetic holder

Heads up and transparent device

High brightness sunlight readable LED display

Wireless antenna for sensors

Screw-free installation with suction cap

Sensors

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

Laser catcher for optional reference to rotating laser

Self-calibrating high precision angle sensor

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

Wireless communication to controller

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

REAL-TIME INDICATION

Depth

2.50m

Slope

1:1

Distance

6.87m
4.61m
4.71m
0.10m
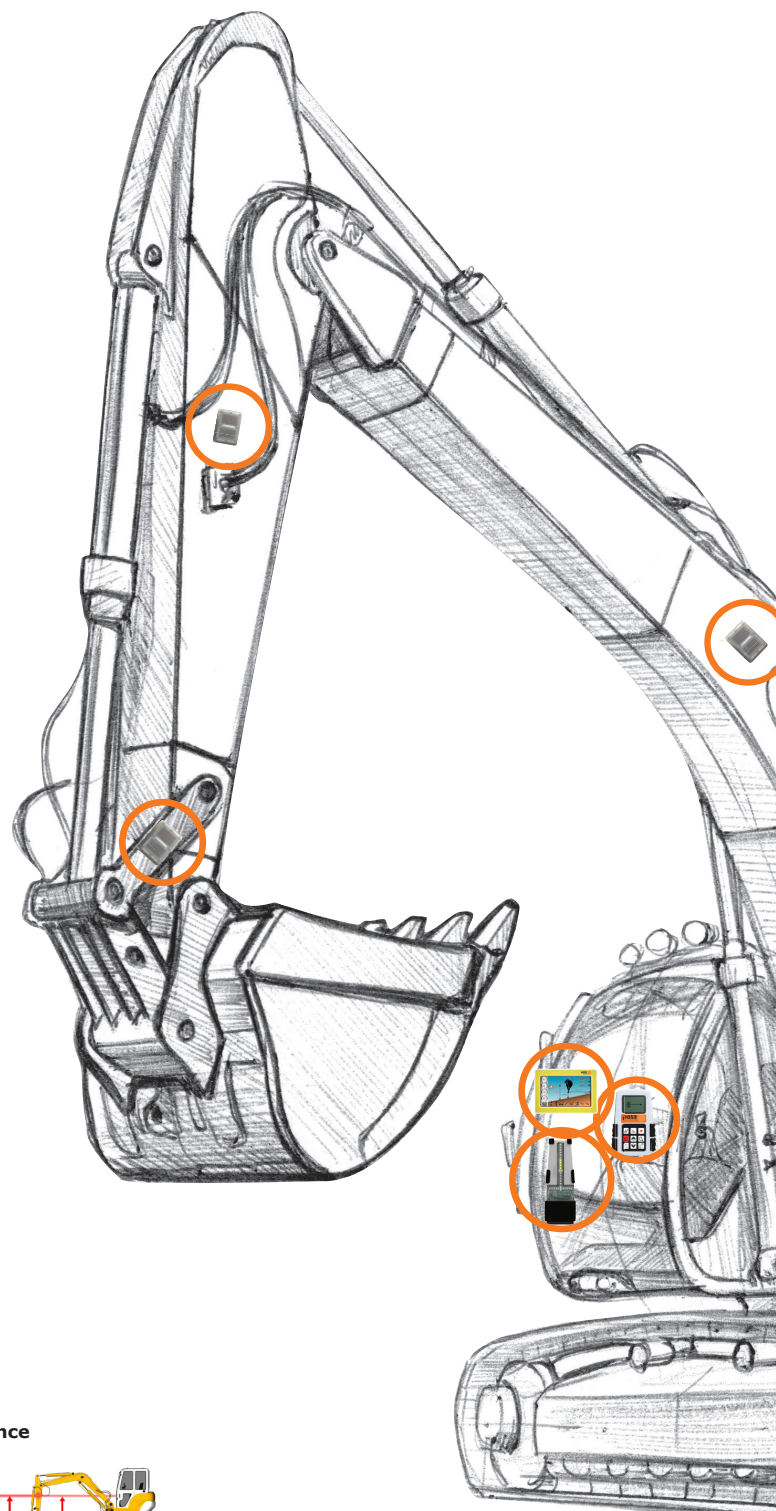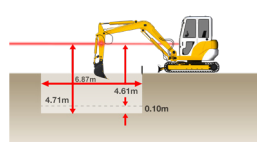
GeoMax MR240
Ideal for use with backhoes and mini-excavators

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 magnet mount with extra strong rare earth magnets.

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

TECHNICAL DATA	
Range	656.16 ft
Accuracy	Fine .23" Coarse 1.18"
Reception angle	240°
Reception height	5.51 ft
Power	3 x AA batteries, 1,5V
Battery life	130h
IP protection	IP67
Weight w/o battery	4.85 lbs
Size	8.66"x4.72"x3.93"

GeoMax 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, signaling 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.

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

TECHNICAL DATA	
Range	656.16 ft
Accuracy	Fine .23" Coarse .47"
Reception angle	360°
Reception height	9.84"
Power	NiMh rechargeable batteries
Battery life	130h
IP protection	IP67
Weight w/o battery	2.20 lbs
Size	14.76"x2.95"x4.21"

GEOMAX CABLE LOCATORS
Increase onsite safety, minimize human error, and save time and money.

GeoMax EziSystem
Increase safety, decrease costs

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

EZISYSTEM I-SERIES
Easily avoid buried cables and pipes before excavation work

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

BENEFITS OF DATA LOGGING IN 5 STEPS

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

GEOMAX ACCESSORIES & QUALITY MANAGEMENT

GeoMax equipment is built with the intention to withstand all conditions you run into during your daily ask.

GeoMax Accessories

GeoMax accessories have been individually tested to provide you the best performance and reliability during all your daily tasks. You can be assured that the complete range of GeoMax accessories is of quality that meets the highest demands and simply "works when you do." This is a selection of our current accessories portfolio. Ask your local GeoMax representative for additional options.

HEAVY DUTY TRIPODS

- Heavy Duty Square Dowel: Fully Extended Height: 64 in
- Collapsed Height: 41 in
- Tripod Head: 6 in
- Weight: 9 lbs
- Heavy Duty Aluminum: Fully Extended Height: 70 in
- Collapsed Height: 41 in
- Tripod Head: 6 in
- Weight: 18 lbs

MEDIUM WEIGHT TRIPODS

- Quick Clamp (Flat Head)
- Color Options: Yellow, Orange, Black
- Twist Clamp (Flat Head)
- Color Options: Yellow, Black
- Fully Extended Height: 67 in
- Collapsed Height: 43 in
- Tripod head: 6 in
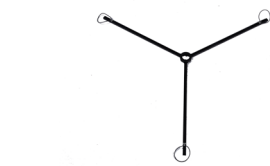- Weight: 10 lbs

LIGHT WEIGHT TRIPODS

- Light Weight Aluminum Tripod Quick Clamp, Yellow
- Fully Extended Height: 63 in
- Collapsed Height: 39 in
- Tripod head: 5 in
- Weight: 7 lbs

GeoMax Tripod Specifications	82463319	82463320	82463321	8336552	8336553	8336556	8336562	8336559	8336558	8336560	8336561	8379917
Fully Extended Height	70 in	108 in	144 in	63 in	67 in	67 in	67 in	69 in	69 in	70 in	70 in	64 in
Collapsed Height	41 in	55 in	64 in	39 in	43 in	43 in	43 in	43 in	43 in	43 in	43 in	41 in
Tripod Head Size	6 in	6 in	6 in	5 in	6 in	6 in	6 in	6 in	6 in	6 in	6 in	6 in
Weight in lbs	18 lbs	1 lbs	21 lbs	7 lbs	10 lbs	10 lbs	10 lbs	18 lbs	20 lbs	18 lbs	18 lbs	9 lbs
Gross Weight with pkg.	20 lbs	20 lbs	28 lbs	8 lbs	11 lbs	10 lbs	10 lbs	20 lbs	22 lbs	20 lbs	20 lbs	11 lbs

ELEVATING TRIPODS

- 9 ft Elevating Tripod:
  Fully Extended Height: 108 in
- Collapsed Height: 55 in
- Tripod head: 6 in
- Weight: 16 lbs
- 12 ft Elevating Tripod:
  Fully Extended Height: 144 in
- Collapsed Height: 64 in
- Tripod head: 6 in
- Weight: 21 lbs

FIBERGLASS TRIPODS

- Fiberglass Tripod, flat head
  with Dual Clamp:
  Fully Extended Height: 69 in
- Collapsed Height: 43 in
- Tripod head: 6 in
- Weight: 20 lbs
- Twist Lock and Quick Clamp
  Wood Fiberglass Tripod: Fully
  Extended Height: 70 in
- Collapsed Height 43: in
- Tripod head 6: in
- Weight: 18 lbs

WOOD TRIPODS

- Wood Tripod, Dual Clamp with
  Tool Kit:
  Fully Extended Height: 69 in
- Collapsed Height:43 in
- Tripod head: 6 in

DOMED HEAD TRIPODS

- Medium Weight Aluminium
  Tripod- Domed Head
- Fully Extended Height: 67 in
- Collapsed Height: 43 in
- Tripod head: 6 in
- Weight: 10 lbs

TRIPOD STABILIZER

- Tripod Stabilizer

GeoMax Accessories

LI-ION BATTERIES

- ZBA301 for Zipp10 Pro/Zoom40 total stations, 4.4Ah
- ZBA201 for Zoom total stations and Zenith15/25 Pro GNSS, 2.6Ah
- ZBA400 for Zoom total stations, 4.4Ah
- ZBA601 for Zenith35 Pro GNSS, 3.4Ah
- ZBA700 for Zenius5, 3.4Ah
- ZBA210 for Zenius8, 5.2Ah

CHARGERS

- ZCH201 charger for ZBA201/400
- ZCH301 charger for ZBA301
- ZCH601 charger for ZBA601
- ZCH700 dual charger for ZBA700

TOTAL STATION, CONTROLLER & DIGITAL LEVEL CABLES			
Zipp10 Pro/Zoom40	USB	Cable mini-USB to USB host connecting to a PC/tablet	ZDC301
Zoom25/50	USB	Cable Lemo-USB connecting to a PC/tablet using USB transfer technology	ZDC217
ZDL700	USB	Cable: Lemo-USB connecting ZTS600 & ZDL700 to PC/tablet	ZDC102

GNSS CABLES			
ZENITH15/25 PRO	RS232	Cable Lemo-RS232 connecting to a PC/tablet	ZDC227
	USB	Cable Lemo-USB connecting to a PC/tablet	ZDC226
	Satel EA-SyPro/battery	Y-Cable Lemo to Lemo and clamps connecting with Satel EASyPro radio and external battery for power supply	ZDC225
ZENITH35 PRO	USB/RS232	Y-Cable Lemo to USB and RS232 for Zenith35	ZDC509
	Satel EA-SyPro/battery	Y-Cable Lemo to Lemo and clamps connecting with Satel EASyPro radio and external battery for power supply.	ZDC221
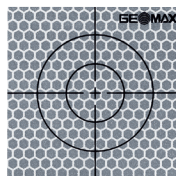
ZTM100
- Self-adhesive reflective target 6x6cm
- For measurement of surfaces standard EDM

ZDE100/GFZ4
Diagonal eyepiece.

LASER RECEIVERS

The GeoMax Zone Series comes with four laser receivers that will complement and boost your performance.

	ZRB90 BASIC	ZRP105 PRO	ZRD105 DIGITAL	ZRD105B
Working diameter	600m/2000ft	900m/3000ft	900m/3000ft	900m/3000ft
Detection window	80mm/3.1in	35mm/1.5in	105mm/4in	105mm/4in
Numeric readout height	-	-	90mm/3.5in	90mm/3.5in
Beam catching	-	-	-	✓
Beam lock	-	-	-	✓

GSS111

- Four-section telescopic staff
- Provides dual measuring faces
- bar code and millimeter graduations

DUAL FACE STAFF

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

ZCB100
Backstrap for hard shell containers.

ZCT102
Hard shell container for two circular prisms, two carriers, two tribrachs.

HAND LEVEL
- 2X Hand Level 5-7 inch

HEAVY DUTY BAGS
- Lath bags available in 36" or 48" lengths
- Stake bags available in 18" or 20" lengths

DATA COLLECTOR CASES
. Available in large or small

GeoMax Accessories

ZPC200

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

ZPC201

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

ZPC202

- GNSS pole
- Length 25cm
- For mounting Zenith receiver on carrier as extension for base setups

COMPRESSION LOCK POLES

- Compression Lock Prism Poles with 5/8ths x 11 adjustable height tip
- Metric and feet, 10ths and 100ths graduation with carrying case.
- Available in 8.5 ft, 12 ft or 15 ft.

KNOB LOCK POLES

- Knob Lock Prism Poles with 5/8ths x 11 adjustable height tip
- Metric and feet, 10ths and 100ths graduation with carrying case.
- Available in 8.5 ft, 12 ft or 15 ft.

QUICK RELEASE POLES

- Quick Release Prism Poles with 5/8ths x 11 adjustable height tip
- Metric and feet, 10ths and 100ths graduation with carrying case.
- Available in 8.5 ft, 12 ft or 15 ft.

RANGE POLES

- Available in 4ft, 8ft or 12ft

MINI PRISM STAKE OUT POLES

- Mini stake out pole with 5/8ths x 11 prism threads
- Available in red or yellow

CARBON FIBER BIPOD

- Carbon fber bipod with carrying case.
- Available in standard or medium heights

PRISM POLE BIPODS

- Prism Pole Bipod with thumb release and carrying case
- Available in red or yellow

PRISM POLE STAND

- Prism Pole Display Stand

TOPO SHOES

- Regular and wide topo shoes available
- Replacement points available

GeoMax Accessories

ZCA102

- Refector carrier with plate level and optical plummet, for precise positioning.

ZCA100

Tribrach carrier for GNSS antennas.

ZCA101

Tribrach carrier with stub for prisms.

ZTR101

- Standard tribrach without optical plummet, black.

ZTR103

Standard tribrach with optical plummet, black

ZTR201

Advance tribrach without optical plummet, black.

TRIBRACH ADAPTERS

- Fixed Tribrach adapter

TRIBRACH ADAPTERS

- Tribrach adapter friction rotatable

TRIBRACH ADAPTERS

- Tribrach adapter with removable center

ZRP1
360° prism with soft bag.

GRZ122
360° prism with 5/8" for GNSS antenna.
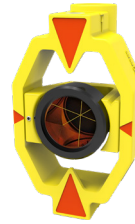
ZMP101
Mini prism with tip.

ZMP100
- Mini prism 0-constant with tip
- fits to ZPC105 pole

MINI PRISM
- Mini prism ystems with adjustable vials in yellow or orange
- Stakeout mim prism assembly in orange

ZPR100 AND ZTP100
- Circular prism with red holder 0-offset
- ZTP100 target plate for precise aiming over long distances is separately available

TILTING PRISMS
- Tilting Prism Assembly with 6x9 inch target available in fluorescent orange or yellow
- Tilting Prism Assembly with 5 1/2 x 7 inch target available in fluorescent orange or yellow
- Strobe Prism Assembly with 5 1/2 x 7 inch target and case
- Tilting Prism Assembly with locking lever, target and case

STANDARD PRISMS
- Water Sealed Prism, 62mm diameter silver coated with case
- Silver or Copper coated prism, 62mm diameter with case
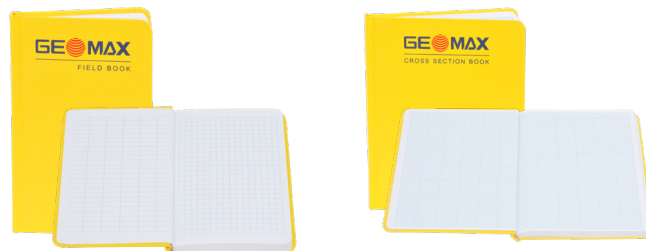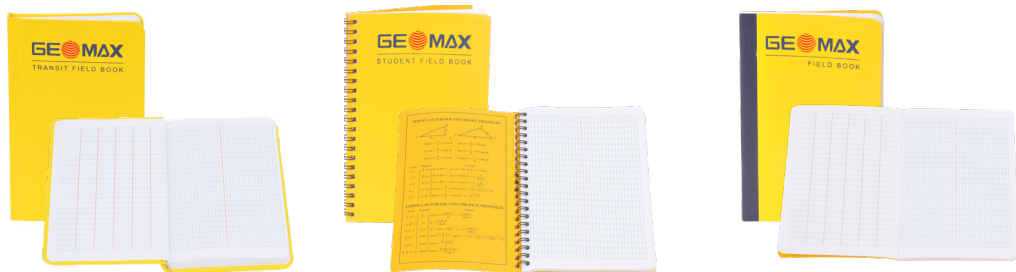- Prism Mount with 6x9 inch target in fluorescent yellow or orange with case
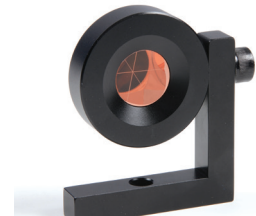
90 DEGREE L-BAR PRISM
- 90 Degree L-Bar monitoring prism

GeoMax Accessories

FIELD BOOKS

- Transit Field Books
- Student Field Books
- Mining Transit Books
- Engineers Field Books
- Level Books
- Cross Section Books

FIBERGLASS RODS–SQUARE

- Fiberglass Rods- Square w/ carrying case
- Available in 13 ft, 16 ft, 20 ft, 25 ft. Comes in inches, tenths or metric.

SK RODS- FIBERGLASS OVAL

- SK Rods- Fiberglass, Oval
- Available in 25 ft 7 sections, ft and tenths w/carrying case Head: 6 in, Weight: 18 lbs

ALUMINUM RODS

- Aluminum Rods w/carrying case
- Available in 13 & 16 ft, in inches, tenths or metric

DIRECT ELEVATION RODS

- Direct Elevation Optical Rods
- Direct Reading Laser Rods
- Direct Read Cut/Fill Rods

ROD LEVEL

- Rod Level

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

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NovAtel On board® is a registered trademark of NovAtel Inc.
Other trademarks and trade names are those of their respective owners.

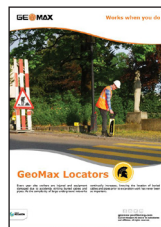# GeoMax Selection of our portfolio:

X-PAD Ultimate

Total Stations

GNSS

Laser Rotators

Locators

Zoom3D

Zeta125 Series

Zenius5

Digital level

geomax-positioning.com