



# GeoMax General Catalogue





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GEOMAX NETWORK



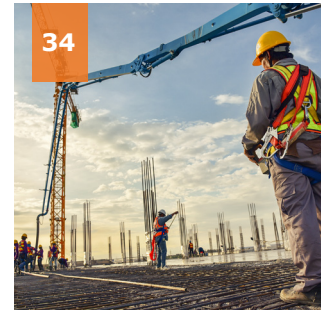
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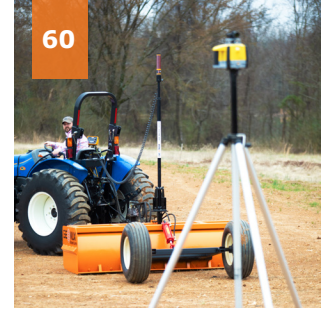
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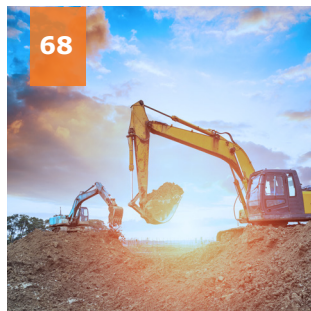
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# GeoMax Authorised Dealer Network in UK & Ireland.

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 Europe, 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 professionals 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 in Europe, North America and Asia. 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.



**HEXAGON**





Our specialist dealers will work with you to provide the right surveying equipment that best suits your needs, help you to work efficiently and supported by a dedicated service team.

### Global Survey Equipment Ltd

Contact : Mark Owen  
Atherton, Manchester  
+44 (0) 1942 896244  
globalsurveyequipment.com



### Geocal

Contact : Darran Foster  
Lisburn N. Ireland  
+44 (0) 28 9262 9695  
geocal.shop



### Geo Survey Instruments

Contact : Christina Rejaei  
Huddersfield, West Yorkshire  
+44 (0) 1484 540700  
geosurvey.co.uk



### Hitechniques Ltd

Contact : Philip Hanrahan  
Dublin, S. Ireland  
+353 (0) 1 2572323  
hitechniques.ie



### Recon Survey & Safety

Contact : Simon Finney  
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+44 (0) 1522 697777  
reconsurveyandsafety.co.uk

### Visual-ize

Contact : Tom Button  
Biggleswade, Bedfordshire  
+44 (0) 1767 666100  
visual-ize.co.uk



### A1 Survey Ltd

Contact : Steve Thomas  
Caerphilly, Wales  
+44 (0) 29 2088 4402  
a1surveyequipment.net

A1 SURVEY



### Survey Max Limited

Contact : David Price  
Maidenhead, Berkshire  
+44 (0) 1753 201200  
surveymax.co.uk



### Progeo Survey Ltd

Contact : Doug Cashman  
Horley, Surrey  
+44 (0) 1342 458461  
progeosurvey.co.uk



### Surveytech

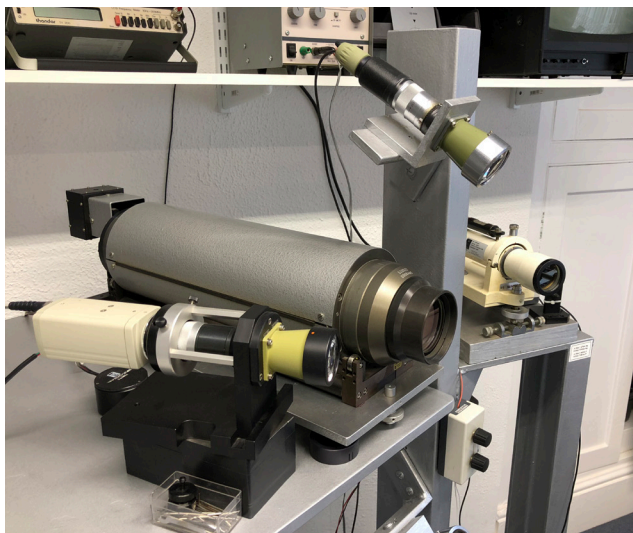
Contact : Tom Lacey  
Mitcham, Surrey  
+44 (0) 208 6402960  
survey-tech.co.uk



# GEOMAX AUTHORISED SERVICE PARTNER NETWORK

GeoMax dealers are committed to providing an outstanding customer experience by listening to your needs and understanding the challenges you face.

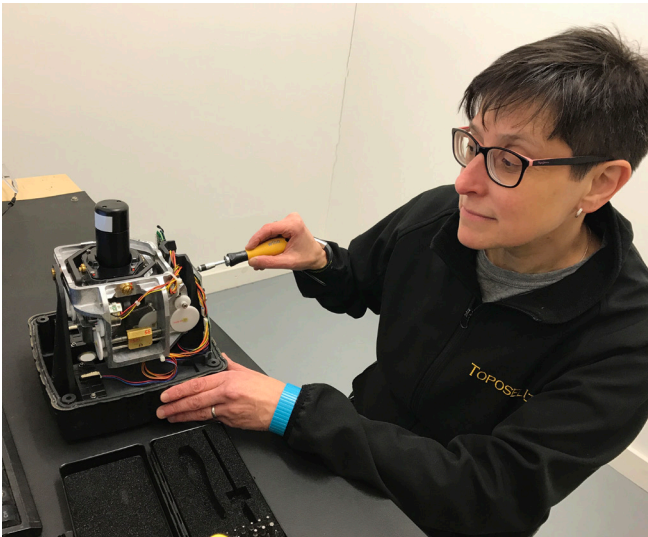
GeoMax Authorised Service Partner status is given to those dealers who successfully complete the stringent training at the GeoMax Global Academy. In addition, the state-of-the-art approved service centres are regularly audited by qualified GeoMax technicians to maintain the high level of standards you would expect from a Hexagon Group organisation.





## GEOMAX AUTHORISED SERVICE PARTNERS PROVIDE:

- **GeoMax trained Technicians:**  
Professional, reliable service from experts in service, repair and calibration of surveying instruments and specialist product knowledge.
- **State-of-the-art Workshops:**  
GeoMax audited, fully equipped with special optical calibration equipment.
- **Improved Productivity:**  
Fast turnaround, same day calibration with hire fleet option to keep your project moving.
- **Improved Efficiency:**  
Customised software for each instrument reduces the need for constant adjustments.
- **Certification:**  
Detailed service report with certificate of calibration for maintenance and repair of all instruments.
- **Product Innovation:**  
Feedback from global service partner community drives continuous improvement & software innovation.



Toposell Service Technician



SurveyTech Service Technician



A1 Survey Service Center

# Switch to GeoMax

GeoMax systems are designed for and used by surveyors. The surveying portfolio is known for its in-field robustness and ease of use from total stations, state-of-the-art X-PAD Ultimate software, GNSS instruments, rotating and layout lasers, optical and digital levels. The superior design quality and functionality enables us to deliver products that "work when you do", irrespective of weather, location or task.

## **WE WORK WITH COMPANIES LARGE AND SMALL. HERE ARE JUST A FEW OF OUR MOST VALUED CUSTOMERS:**

- Aero Surveying
- Bora Construction
- Derek Kilbride
- GAP
- Greenhatch
- Healers Surveys
- Jackson Civil Engineering
- JJ Mullins Civil Engineering
- John Turner Construction Group
- MicroMap Events
- Milton Keynes Surveys
- Mostrim Groundworks
- OHOB group
- R.J.Smith Construction
- Tarmac



Healers Surveys



Mostrim Groundworks



Mostrim Groundworks





*"The GeoMax team listened to our needs, performed very professionally throughout the process and the service has been of the highest order. All the GeoMax instruments delivered are easy to use and give us high quality, precision data."*  
Robert Page, Director Greenhatch Group



Greenhatch and GeoMax teams on launch day.



*"When it was time to upgrade our kit it was the X-PAD software that attracted us to GeoMax. It's the first software that works exactly as I need it too especially for setting out - saves prep time in the office and gives the flexibility to respond to our clients needs. From the first demo trial I could see that GeoMax absolutely fitted the bill."* - **MicroMap Events**

*"The ability to use linework and shapes (rectangles/circles) within the X-PAD Survey application certainly increased productivity on site. The Survey application is so easy to use, each site team were able to use the GeoMax Zoom90 or Zenith15 with confidence right from the word go."* - **Jackson Civil Engineering**

*"I've used a Zoom90 for over a year now and it performs really well in the field. The X-Pad software is very intuitive and if I ever have any issues or questions, the team are always responsive. Overall I'm a happy customer."*  
**Lucian Oiyariu, Mostrim Groundworks**



*"As a customer for almost 10 years the team provide an outstanding level of service, very knowledgeable and highly experienced staff. Well stocked, consumables and hire equipment all available nationwide."* - **Aero Surveying**



MicroMap Events Surveying the site for BBC One Countryfile Live, Castle Howard, Yorkshire

**It's easy to switch to GeoMax.  
Get in touch for a free demonstration.  
[workwhenyoudo.co.uk](http://workwhenyoudo.co.uk)**



# 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.

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

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

### X-MOTION™ HYBRID DRIVES

The GeoMax Zoom90 incorporates highly innovative X-motion hybrid drives, promoting automation performance compared to conventional drives. It will follow your target at 90km/h at 100m distance.

### NAVLIGHT™

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

### ACCXESS™ EDM TECHNOLOGY

GeoMax's accXess EDM Technology provides leading reflectorless measurements up to 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 field controller to perform remote control tasks with increased productivity. Zoom90 uses the Windows CE® operating system, which enables a variety of powerful field software to run, offering you freedom to choose software that best suits your needs. Full VGA colour touch display will also provide you with superior performance and full graphic capability.

	Scout	TTrack	Aim	accXess 10	accXess S
Robotic (R)	✓	✓	✓	✓	✓

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

This solution convinces due to its independency of special, expensive and power-consuming active prisms. Zoom70 keeps your pole lightweight and convenient to carry all survey-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 high performance over long ranges. Either way, it is ideal for one-man robotic surveys.

Combine your preferred software and datalogger to perform remote control tasks with increased productivity. Zoom70 uses the Windows® CE operating system, which enables a variety of powerful field software to be run, offering you freedom to choose software that best suits your needs.

## TECHNICAL DATA

Accuracy	5", 2", 1"
Prism (range, accuracy)	3500m, 1mm + 1.5ppm
Prism, long-range (range, accuracy)	10,000m, 5mm + 2ppm
Non-prism (range, accuracy)	1,000m/500m, 2mm + 2ppm*
TTrack range	800m at round prism
AiM range	1,000m at round prism

\* > 500m: 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.

This 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







accXess 10

GEOMAX

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# 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 speed and highest accuracy even on extremely long ranges. This means a wider operational coverage and significantly less time lost with switching setups.

### 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.

### 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.

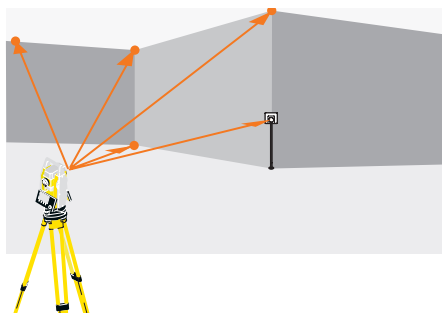
TECHNICAL DATA	
H <sub>z</sub> , V Standard deviation (ISO 17123-3)	1", 2", 5"
Compensator system	Quadruple-axis compensation
Measuring range with prism	10,000m
Accuracy on reflector (Fine/Tracking)	2mm + 2ppm/3mm + 2ppm
Reflectorless range accXess5	>500m
Reflectorless range accXess10	>1,000m
Accuracy reflectorless	2mm + 2ppm (>500m 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
- 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. Featuring X-PAD, GeoMax FieldGenius, Carlson SurvCE or any localised field software, the Zoom40 allows you to work as best fits your needs. WinCE® even allows you to run your own developments and to personalise your system.

## COLOUR TOUCH SCREEN

The extra-large 3.5" Q-VGA high resolution colour 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 stake-outs, easier and more productive than ever before.

## FULLY FEATURED

All the openness and connectivity combined with a system offering a colour and touch display, neXus5, the long range non-prism measurement, and all your favourite Windows CE® applications make 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	3,500m
Accuracy on reflector (Fine/Tracking)	2mm + 2ppm/3mm + 2ppm
Reflectorless range neXus5	500m
Accuracy reflectorless	2mm + 2ppm
Communication	USB, Bluetooth®, USB Host, RS232

## GeoMax Zoom40 neXus5

Distance measurement to reflector and 500m reflectorless.



# X-PAD





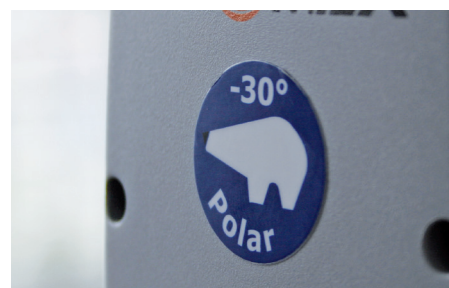






# GeoMax Zoom25 Series

If you don't want to compromise on quality



## ON BOARD SOFTWARE

Easily control your data with the flexible and easy-to-use on board 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 under difficult conditions. Reflectorless neXus5 EDM technology supports measurement ranges up to 500m.

## BUILT FOR ALL ENVIRONMENTS

The GeoMax Zoom25 Series withstands the toughest environments. With the optional polar certification, the Zoom is individually tested at -30°C. With our extensive factory tests, you can be sure that GeoMax "works when you do."

## TECHNICAL DATA

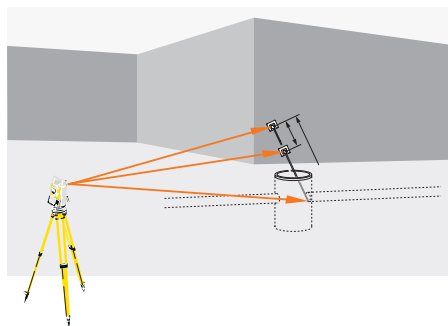
Hz, V Standard deviation (ISO 17123-3)	2", 5"
Compensator system	Quadruple-axis compensation
Measuring range with prism	3,500m
Accuracy on reflector (Fine/Tracking)	2mm + 2ppm/3mm + 2ppm
Reflectorless range neXus5	500m
Accuracy reflectorless	2mm + 2ppm
Communication	USB, Bluetooth®, USB Host, RS232

## GEOMAX ZOOM25 NEXUS5

Distance measurement to reflector and 500m reflectorless.



# X-PAD



## 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
- 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 liberates you from the need to use any PC.

## PERFORMANCE, ROBUSTNESS

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

## MULTIFUNCTIONAL KEYBOARD

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

## APPLICATIONS

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

- Data collect 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	3,000m
Non-prism range	250m
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 levelling.

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 in the field to increase your productivity and taking your performance to the new level.







# GeoMax Zenith15

Built to last, built for the future



## EXTREMELY RUGGED

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

## NOVATEL® ON BOARD

Equipped with Measurement Engines from NovAtel®, a leading provider of high precision GNSS, Zenith15 receiver 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, GLONASS, SBAS
Positioning rate	5Hz
Accuracy static H/V	5mm ± 0.5ppm (rms)/10mm ± 0.5ppm
Accuracy kinematic H/V	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.







**X-PAD**



# GeoMax Zenith35 Pro Series

Full spectrum of satellite signals, unlimited connectivity and 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

## 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 vertical placement of the pole is not possible, such as house corners.

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

- 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 30° independent from magnetic field discrepancies.

TECHNICAL DATA	
Measurement Engine	NovAtel OEM7, 555 channels, multi-frequency/constellation
AdVance® technology	High fix availability + reliability
Satellite signals	GPS, GLONASS, BeiDou, Galileo, QZSS, SBAS
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)

\* Optional for Zenith35 Pro GSM-UHF-TAG







  
**Tilt&Go**

**X-PAD**



# GeoMax Zenith40

Experience the full GeoMax technology



## QUALITY

Zenith40 with its remarkable operating temperature from -40°C up to +65°C is fully dust-tight, withstands powerful water jets and even temporarily immersion under water and complies to the international IP68- as well as to the tough US MIL standards.

## SUPERIOR POSITIONING

Take advantage of NovAtel's latest fully-featured OEM 719 measurement engine. It enables you to receive multi-frequency signals from all existing satellite systems worldwide. Struggles with canopy - like working under trees, or inaccurate results because of multipath signals are history due to the enhanced GeoMax Q-Lock Pro™ RTK which also reduces the time-to-fix. Also on board of the Zenith40, Hexagon's TerraStar Precise Point Positioning (PPP) service that provides C-Pro correction data at centimeter level quality all around the globe. This service significantly enhances your productivity, as it eliminates the need a of network connection and reference from a data base station. Furthermore no need to worry about reference frames anymore. The PPP position is provided within the coordinate system.

The GeoMax Q-Lock Pro™ algorithm automatically detects available correction services and selects the one providing the highest accuracy.

## OPEN & FLEXIBLE CONFIGURATION

No matter if you want to run GeoMax X-PAD Ultimate on a dedicated GeoMax field controller or your preferred software on your own devices, this GNSS antenna allows you to work in the way that best fits your needs. Zenith40 can either be fully configured within the field software or with the Zenith Manager, a stand-alone application available for Windows® and Android™ operating systems. This enables you to configure your antenna without using the field controller. Being freely available on the Google Play™ store the latest version of

Zenith Manager can be downloaded at any time and used on any Android™ based device, such as mobile phones or tablets. The innovative and unique QR-iConnect functionality speeds your connection process. Forget the times of tedious sensor search and selection by toggling through extensive device lists. Simply scan and go!

## TECHNICAL DATA

Measurement Engine	NovAtel OEM7, 555 channels, multi-frequency/constellation
Q-Lock Pro™	Lowest noise and advanced mutipath mitigation for highest reliability
Satellite signals	GPS, GLONASS, BeiDou, Galileo, QZSS, SBAS
Positioning rate	5Hz, 20Hz (opt)
Accuracy static H/V	3mm + 0.5ppm (rms)/ 5mm + 0.5ppm (rms)
Accuracy RTK H/V	8mm + 1ppm (rms)/ 15mm + 1ppm (rms)







X-PAD



# 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 visualised in the image allowing a visual completeness check of your survey directly on site. And if you should ever have missed to measure some points, this can be done easily in the office.

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



### KEY SPECIFICATIONS:

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



# GeoMax GNSS antennas

	Zenith15	Zenith35 Pro	Zenith35 Pro TAG	Zenith40
NOVATEL MEASUREMENT ENGINE				
RTK technology	Q-Lock Pro™	NovAtel AdVance®		Q-Lock Pro™
Channels	120	555		555
BeiDou tracking	-	B1, B2, B3*		B1, B2, B3* (opt)
Galileo tracking	-	E1, E5a, E5b, AltBOC, E6*		E1, E5a, E5b, AltBOC, E6* (opt)
QZSS tracking	-	L1, L2C, L5, L6* (opt.)		L1, L2C, L5, L6* (opt.)
NavIC	-	L5*		L5*
Positioning rate	5Hz	5Hz	5Hz, 20Hz (opt)	5 Hz, 20 Hz (opt)
SBAS	EGNOS, WASS, MSAS, GAGAN	EGNOS, WAAS, MSAS, GAGAN		EGNOS, WAAS, MSAS, GAGAN
Precise Point Positioning (PPP)	-	-		Yes
TILT & GO				
Single / Dual Mode	-	-	Yes	-
ACCURACY (RMS)***				
Static H/V (mm + ppm)	5 + 0.5 / 10 + 0.5	3 + 0.5 / 5 + 0.5		3 + 0.5 / 5 + 0.5
RTK 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	Yes	Yes		Yes
UHF radio module	Microhard (Opt.)	SATEL		SATEL (Opt.)
Bluetooth®	Yes	Yes		Yes
WiFi	-	Yes		-
Communication port	USB, serial and power	USB, serial and power		USB, serial and power
QR-iConnect	-	-		Yes
Zenith Manager	-	-		Yes
INTERFACES				
Data recording	Removable microSD card	Removable microSD card and 8 GB internal memory		Removable microSD card
GSM / TCP / IP	Removable SIM card	Removable SIM card		Removable SIM card
PicPoint / X-Pole support	Yes	Yes		Yes
POWER SUPPLY				
External power / Internal battery	Lemo® plug / Removable, Li-Ion 2.6 Ah	Lemo® plug / Removable, Li-Ion 3.4 Ah		Lemo® plug, Removable, Li-Ion 2.6 Ah
Smart battery	-	Yes		-
Operating time (static/rover)	7.5 h / 5 h	8h / 6h		9h / 6h
PHYSICAL SPECIFICATIONS				
Dimensions / Weight**	Height 95 mm, ø 198 mm / 1.07 kg	Height 131 mm, ø 161 mm / 1.17 kg		Height 95 mm, ø 198 mm / 1.14 kg
Operating temperature	-40°C to 65°C	-40°C to 65°C		-40°C to 65°C
Protection class / Humidity	IP68, 100%, condensing	IP68, 100%, condensing		IP68, 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		Mechanical stress resistant according to ISO 9022-36-05
Shock	Withstands 2m topple over onto hard surface	Withstands 2 m drop onto hard surface		Withstands 2 m drop onto hard surface
WARRANTY				
Standard Warranty	1 year	1 year		1 year
Extendable warranty	Yes	Yes		Yes

\* Glonass L3, BeiDou B3, Galileo E6, QZSS L6 and NavIC L5 are foreseen to be provided through future firmware upgrade.

\*\* Depending on device configuration; w/o battery

\*\*\* 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.



A large-scale construction site at dusk or dawn. A tall yellow and blue tower crane stands prominently in the center. In the foreground, a dense grid of steel reinforcement bars (rebar) is laid out on a construction deck. Several workers wearing hard hats and safety vests are visible, some standing and others working on the rebar. To the right, a worker is using a tool to adjust vertical rebar columns. The sky is filled with soft, white clouds, and the overall lighting suggests the 'golden hour' of late afternoon or early morning.

# 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 ZeniusX

## Rugged Android™ field controller



### POWERFULL AND ROBUST

The GeoMax ZeniusX is a premium class field controller with unmatched user friendliness, class-leading performance, and the highest flexibility and ruggedness.

### KEY FEATURES:

- Android™ Operating System
- Connectivity: 4G, LTE/Wi-Fi and Bluetooth®
- Tailored for GeoMax TPS/ GNSS and X-PAD field software
- Site documentation with high resolution camera
- GeoTRAIL support for robotic TPS
- Customisable keys for quick access
- Ruggedness
- Fulfills military standards
- Large, crystal clear display



# X-PAD

### TECHNICAL DATA

Processor	Qualcomm® Snapdragon™ Quad Core, 1.1 GHz
Memory/Disk	1 GB program memory; 8 GB storage capacity
Operating System	Android 6.0.1 (Marshmallow)™
Screen	4.3" Wide-VGA sunlight readable TFT with a 480 x 800 resolution
Keypad	Customisable shortcut keys
Battery	Removable Li-Ion smart battery; 3400 mAh 7.4V 25.2 Wh
Communication	Wi-Fi: 802.11 a/b/n Cellular: 4G LTE cellular modem Five Band UMTS/HSPA + (WCDMA/FDD): 850/800,900, 1900 and 2100 MHz; LTE FDD: B1/B3/B5/B7/B8/B20; LTE TDD: B38/B40/B41; WCDMA: B1/B5/B8 Quad-Band GSM: 850/900/1800/1900 MHz USB: High speed USB Type-C OTG port
Navigation	Multi-constellation; single frequency. GPS/GLONASS/BeiDou
Camera	Auto focus, 8 MegaPixel with flash





# 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."



# 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 Field Controllers

## Zenius5 W

## ZeniusX A

USER INTERFACE		
Display	3.5" Full-VGA sunlight readable TFT with a 480 x 640 resolution	4.3" Wide-VGA sunlight readable TFT with a 480 x 800 resolution
Keypad	Customisable shortcut keys	Customisable shortcut keys
Operating System	Microsoft® Windows Embedded Handheld™ 6.5 Professional	Android® 6.0.1 (Marshmallow)
OFFICE / CLOUD COMMUNICATION		
Wi-Fi	802.11 a/b/n	802.11 a/b/n
Cellular	3.75G cellular modem	4G LTE cellular modem
Five Band UMTS/HSPA + (WCDMA/FDD)	850/800,900, 1900 and 2100 MHz	850/800,900, 1900 and 2100 MHz LTE FDD: B1/B3/B5/B7/B8/B20 LTE TDD: B38/B40/B41 WCDMA: B1/B5/B8
Quad-Band GSM	850/900/1800/1900 MHz	850/900/1800/1900 MHz
USB	High speed USB-OTG port	High speed USB Type-C OTG port
STORAGE		
Internal	0.5 GB program memory; 8 GB storage capacity	1 GB program memory; 8 GB storage capacity
MicroSD	SDHC supported Micro SD card slot	SDHC supported Micro SD card slot
USB OTG	Mass-Storage device support	Mass-Storage device support
SYSTEM		
Processor	TI Sitara™ AM335x, 1 GHz	Qualcomm® Snapdragon™ Quad Core, 1.1 GHz
Battery power	Removable Li-Ion smart battery; 3400 mAh 7.4V 25.2 Wh	Removable Li-Ion smart battery; 3400 mAh 7.4V 25.2 Wh
Operating time	Up to 10 hours	Up to 16 hours
INSTRUMENT COMMUNICATION		
Bluetooth®	Class 2 Bluetooth® 2.1 EDR	Class 2 Bluetooth® 4.1 + Bluetooth® LE
Connection	RS232, Industrial standard DB9	USB Type-C
DOCUMENTATION		
Camera	Auto focus, 5 MegaPixel	Auto focus, 8 MegaPixel with flash
NAVIGATION		
GNSS Solutions	Multi-constellation; single frequency. GPS/QZSS, GLONASS, BeiDou, Galileo; SBAS: WAAS, EGNOS, MSAS, GAGAN	Multi-constellation; single frequency. GPS/GLONASS/BeiDou
PHYSICAL		
Dimensions	192*93*42 mm	194*90*39.5 mm
Weight	595 g (Including Battery)	585 g (Including Battery)
Operating temp.	-30°C to +60°C	-30°C to +60°C
Protection class	IP65 dust-tight and withstands water jets	IP67 dust-tight and withstands temporarily immersion under water
Humidity	5 to 95% non-condensing	5 to 95% non-condensing
Vibration	Random: MIL-STD-810G, Method 514.6E-I Sinusoidal: ASAE EP455 Section 5.15.1	Random: MIL-STD-810G, Method 514.6E-I wSinusoidal: ASAE EP455 Section 5.15.1
Shock	Withstands 1.2 m drop on hard surface	Withstands 1.2 m drop on hard surface

**X-PAD**





# Juniper MESA<sup>2</sup>

## Your Office, Anywhere



### MESA 2 RUGGED TABLET

The days of needing multiple devices to collect and analyse data are gone. Running Android™ 5.1 the new Mesa2 Rugged Tablet brings powerful functionality to your mobile data collection, featuring a vast, 7-inch, extra-bright display for easily viewing maps or large images, all-day battery power lasting up to 15 hours, the Mesa 2 is designed for maximum efficiency in the harshest environments. The Mesa 2 is lightweight and ergonomic, minimising fatigue while improving productivity. With all the functionality of a desktop computer packed into a tough, mobile device, the Mesa 2 will truly become your office, anywhere.



### APPLICATIONS

- Natural Resources
- Utilities & Public Services
- Industrial
- Agriculture
- Geomatics
- Military
- Oil & Gas
- Construction
- Public Safety



### ILLUMIVIEW™ HIGH-VISIBILITY DISPLAY

- Large, 7-inch display for easy viewing
- IllumiView technology provides extraordinary visibility
- Optically-bonded capacitive touch screen for needle-sharp imagery
- Chemically-strengthened Dragontrail™ glass for excellent impact & scratch resistance



### PERFORMANCE

- Powerful Windows® 10 and Android™ 5.1 OS for office-to-field use
- Plenty of memory - 4 GB RAM & up to 128 GB flash storage



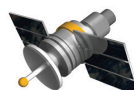
### EXPANDABLE BATTERY

- All-day battery runs 8–10 hours for minimal downtime
- Optional expansion provides additional 4–5 hours
- Operates in extreme temperatures from -4 F to 122 F (-20 C to 50 C)



### JUNIPER RUGGED™

- Maximum protection for your data
- Dustproof & waterproof (IP68 rating)
- Designed to MIL-STD-810G for ultra-ruggedness
- 2-year warranty



### READY FOR ANYTHING

- Long-range Bluetooth® Smart Ready, Wi-Fi, 4G LTE, serial & USB connectivity
- High-performance GNSS receiver
- 8 MP rear, 2 MP front camera
- 1D/2D barcode scanner & UHF RFID



# GeoMax FZ-M1 / FZ-B2

## The ultimate outdoor tablet

The tablet specially designed for field professionals like you - fully rugged to support the most severe weather conditions and equipped with a powerful processor, Windows® 8.1, Android™ 4.4 and Bluetooth®.

The FZ-M1 and FZ-B2 will boost your performance not matter the challenge you face.



**X-PAD**



	FZ-M1	FZ-B2
Mobile computing platform	Intel Celeron® N2807 processor 1.58GHz 1MB L2 Cache	Intel Celeron® N2930 processor 1.83 GHz
Operating system	Windows® 8.1 Pro	Android 4.4®
RAM	2GB	2GB
Camera	2 MP front/5MP rear	2 MP front/5MP rear
Features	WIFI, Bluetooth® 4.0, 4G LTE, USB, USB 3.0; headset; port replicator connector; micro SD/SDHC memory card	WIFI, Bluetooth® 4.0, 4G LTE, USB, USB 3.0; headset; port replicator connector; micro SD/SDHC memory card
Display	7" sunlight-viewable WXGA Active Matrix (TFT) IPS LCD with circular polarizer (up to 500cd/m² brightness); multi-touchscreen	7" sunlight-viewable WXGA Active Matrix (TFT) IPS LCD with circular polarizer (up to 500cd/m² brightness); multi-touchscreen
Storage	128 GB SSD	32 GB eMMC



# GeoMax Zenius700 A

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.

## DESIGNED FOR PROFESSIONALS

Their ergonomic and lightweight design naturally fits into your hands, and once there, the Windows® 8.1 for FZ-M1 or Android™ 6.0 for the GeoMax Zenius700 A functionality will boost your performance no matter the challenge you face.

## FULLY RUGGED

These tablets do not need to hide outdoors. Their multi-touch and sunlight-viewable screen allows you to interact with it without even taking off your gloves. And because accidents in the field can happen, these tablets are also shock resistant and water and dust proof.

ZENIUS700 A	
Mobile computing platform	Intel® Atom™ Processor; up to 1.92GHz
Operating system	Android™ 6.0
RAM	4GB
Camera	2MP front/8MP rear
Features	WIFI, Bluetooth®, Inbuilt GPS, 4G LTE modem, Micro-USB/USB Host, MicroSD Card slot
Display	Extra-large 7" HD display (1280x720), with high sunlight readability and glove proof operation





## GEOMAX SOFTWARE

All GeoMax software is developed to make your daily work more easy 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, customised software for high end topographic tasks, such as measure, stake-out, 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 measure tools. Available in two versions, one dedicated to the professional surveyors and one dedicated to the construction company, offers to both a specific working environment and a set of dedicated features.

### 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 to use the 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 just after you 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 is determined within the graphical view can be stakedout.

### 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 click is all you need to change the measurement mode and switch from GNSS to TPS mode and vice versa.

The GNSS system positioned above the prism, gives you a direct rotation on the prism speeding up the locking operations after loss.

### AUGMENTED REALITY. TURN ON REALITY!

Point the camera to the site and you can see immediately 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 what is not possible to see.

### 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 metres of an excavation or of a pit. You can also import models from DXF or LandXML files. Use the stakeout command to determine, in field, the design elevations.

### BIM

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.

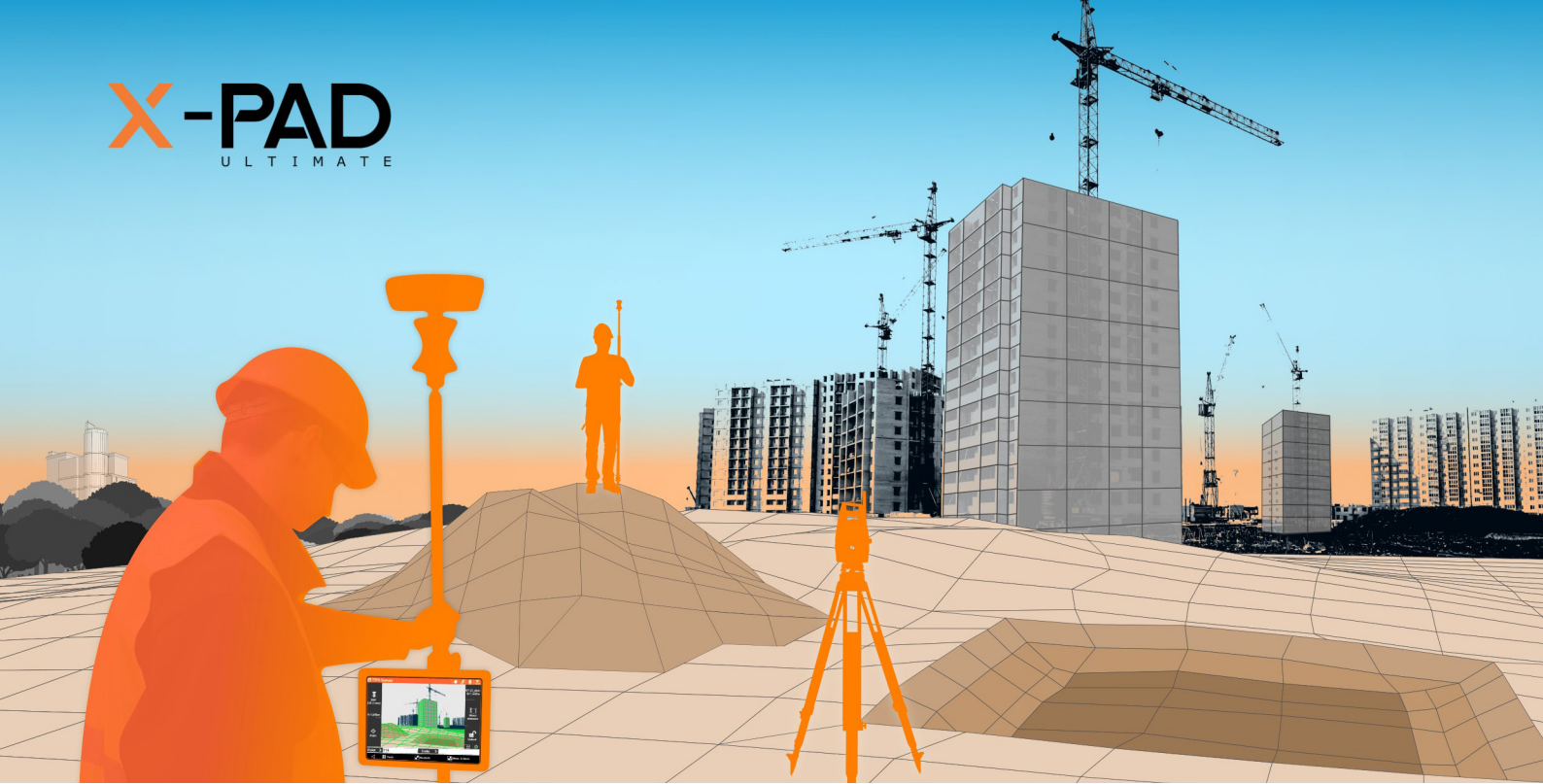
#### FIELD AND OFFICE, ALWAYS CONNECTED

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. If you need to, though, 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.

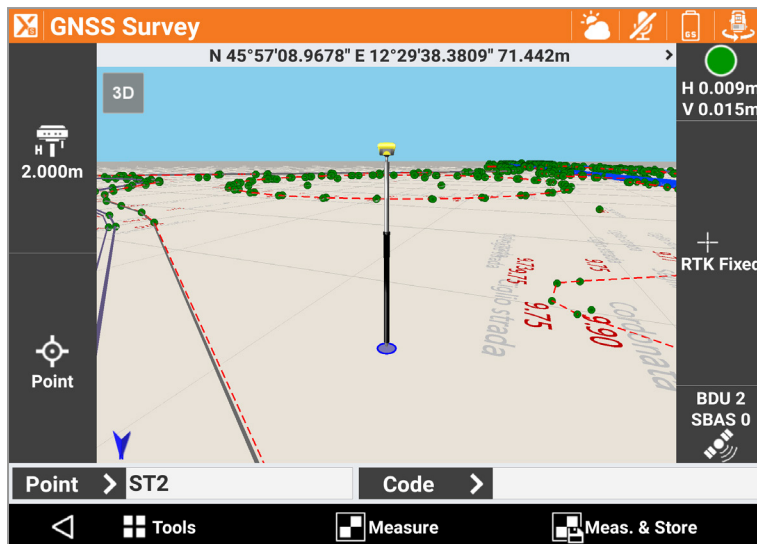
### ROADING. THE WHOLE PROJECT IN THE CONTROLLER

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 (axes, edges, sideslopes, walls, ditches) at any station and with any offset, using the cross sections, the edge polylines or by defining one or more sections template.



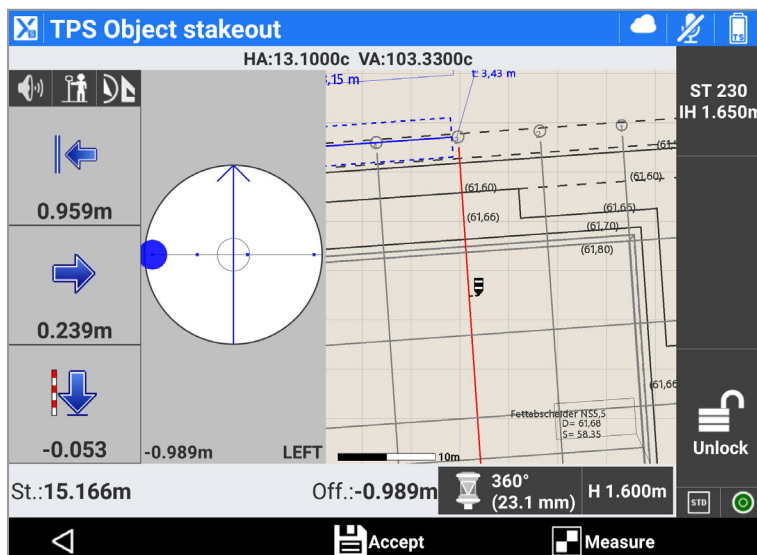


## Survey



**X-PAD ULTIMATE SURVEY** is the best solution for professional surveyors that want accuracy, complete features, flexibility, data integration, scalability and the latest technologies 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



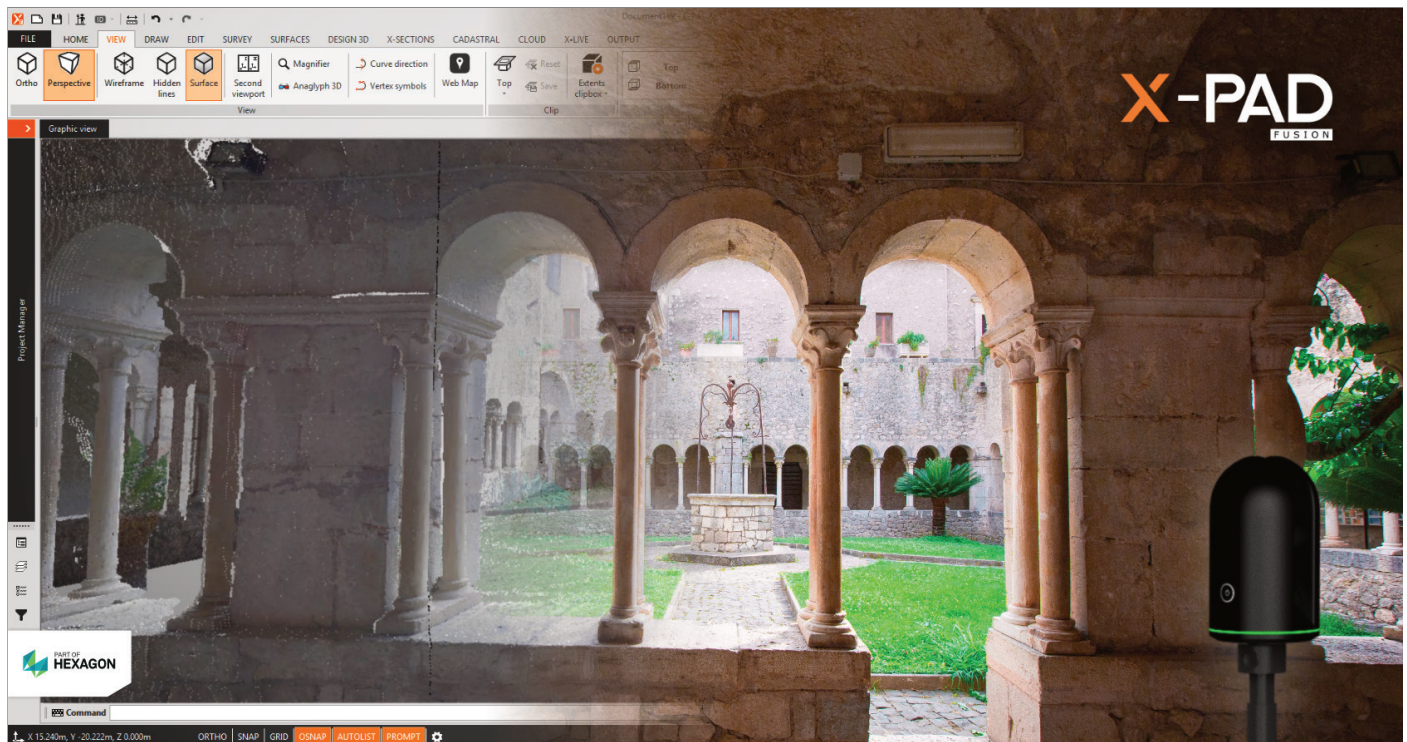
**X-PAD ULTIMATE BUILD** is the ideal solution for all your construction measuring and layout needs - executing all construction activities in an efficient and productive way. It combines data collection from TPS or GNSS, allowing you to perform the measurement, stakeout and as-built with simple and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

X-PAD Ultimate Build is a special and tailored version of X-PAD Ultimate Survey, from which inherits all the main features and functionalities, but differs because it is specifically addressed to construction companies that can solve all measuring situations onsite in an autonomous and independent way, improving productivity and reducing costs. To use X-PAD Ultimate Build you don't need to be a surveyor; all procedures are guided and can also be used by those who use this type of equipment for the first time.



# X-PAD Office Fusion 4.5

The geospatial data office software



X-PAD Office Fusion 4.5 is our latest desktop software integrating geospatial data from TPS, GNSS, scanners and other sensors in a single environment.

## MAKING YOUR WORKFLOW MOST EFFICIENT

Different to other software solutions in the market with X-PAD Fusion, we offer our customers one software solution that manages measurements, coordinates, drawings, point clouds and other types of data in ONE platform in a simple and intuitive way.

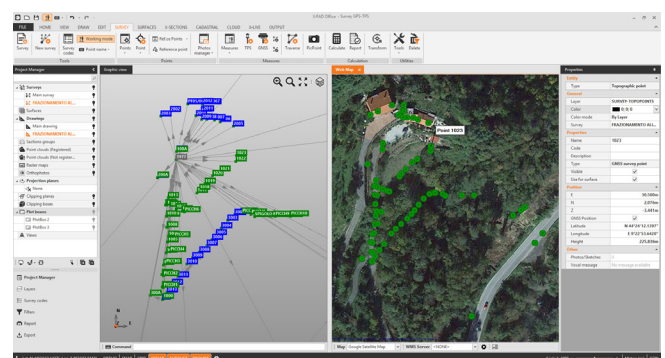
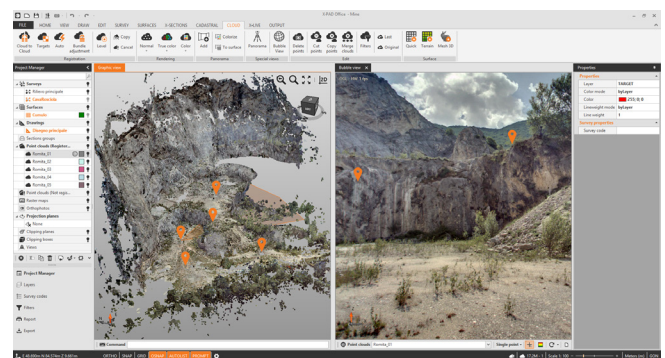
With the X-PAD FUSION OFFICE, you can import the scans directly from the instrument with a specific procedure that colorizes the point clouds from images. It does function with our GeoMax instruments but also with the scanner, BLK360. It perfectly fits to providing an innovative and intuitive solution making your workflow most efficient.

## X-SCAN: THE POINT CLOUDS MODULE

The X-Scan module allows you to register point clouds with an automatic or manual procedure with a few steps to get the final result. From the scan it is possible to generate orthophotos of plans or prospects, take any sort of measurement, create drawings and manage them together with other types of data.

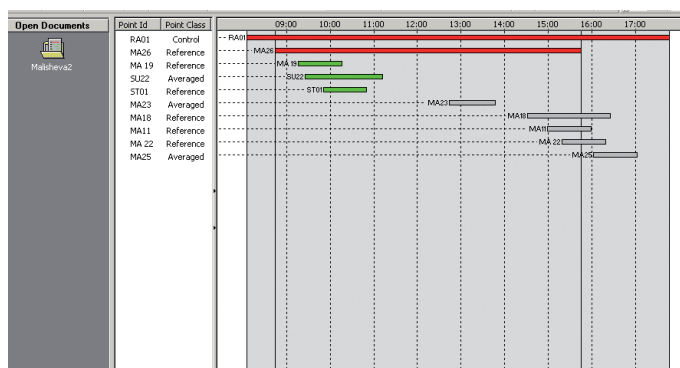
New tools have been added to analyse as-built information and to compare them with design data.

You can, for instance, combine scans and BIM data, compare scan and design surfaces and have a drawing map with the differences.





## The ideal companion for your GeoMax equipment



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.

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.

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.

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.

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 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

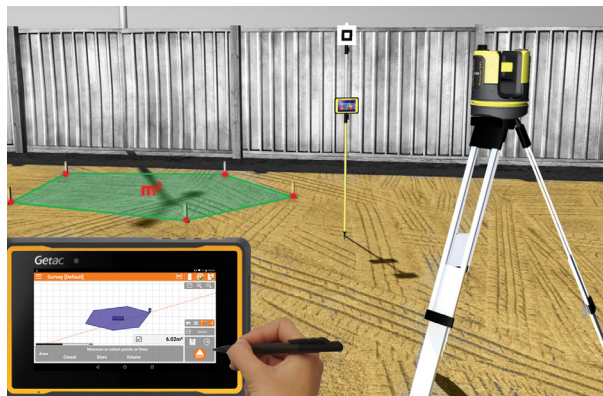


Measurements and layout have never been so easy and fast. With an easy set-up, the intuitive GeoMax X-PAD MasterPlan Android™ software and one-man operation, the Zoom3D will speed up your daily work indoors and outdoors and bring the plan into the field.

### X-PAD AND ZOOM3D – YOUR PERFECT SYSTEM

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

With just a few steps, you are ready to measure. No matter if in dark or sunlight conditions, targeting on hidden points, or over short or long distances up to 50m, the Zoom3D offers many intelligent features to precisely target the aimed point. By pressing one key, the point is measured and visualised on your screen.



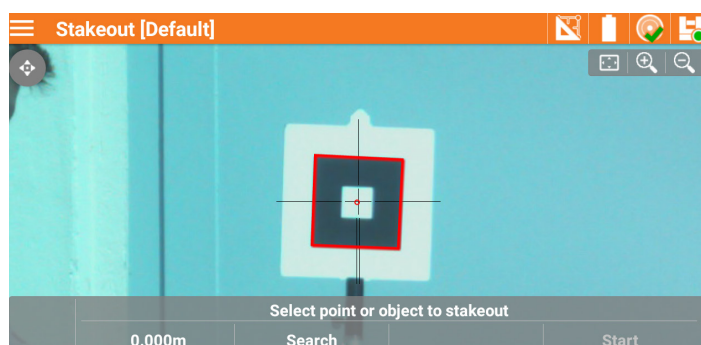
### ONE-MAN LAYOUT

Increase your efficiency and increase productivity in your daily work. X-PAD MasterPlan includes an easy-to-use but powerful stakeout tool for the site layout. With the Zoom3D target recognition technology, you can measure and stake out using a pole by one person.

Easy levelling, plumbing points and staking out - the Zoom3D 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 quickly and easily by using the Zoom3D's drawing function. The 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.



### 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 LASER ROTATORS

Suitable for a wide range of applications,  
GeoMax laser rotators 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 laser rotators portfolio offers the right construction tools for all trades and applications.

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







## 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	-	-	-	✓



# GeoMax Zone80DG

Ready for the most challenging sites



Capable of operating at a speed of 20 rotations per second (rps), the Zone80 DG is a perfect fit for machine guidance solutions. With a laser beam that is stable over large distances, it is especially suited for land levelling and agriculture applications. For optimal land use, Zone80 DG not only gives you a reference for horizontal planes but also for slopes up to 15%.



TECHNICAL DATA	
Functionality	Self-levelling horizontal, digital slope in dual axis (full-automatic), Beam catching option
Operating range (diameter)	1.100m/3000ft
Self-levelling accuracy	± 1.5mm at 30m (±1/16" at 100ft)
Self-levelling range	± 5°
Grade range	Up to 15%
Rotation speed	300, 600, 1200rpm
Laser diode type/class	635nm (visible)/class 1
Batteries type	Li-Ion
Battery life	> 50h
Operating temperature	-20°C to 50°C
Protection	IP67
Warranty	5 years



# GeoMax Zone60 DG

## Fully-automatic dual grade laser

TECHNICAL DATA	
Functionality	Self-levelling 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	-20°C to 50°C
Protection	IP67
Warranty	5 years

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





# 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-levelling 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	-20°C to 50°C
Protection	IP67
Warranty	3 years

# GeoMax Zone40 H

## Best construction site laser rotator

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 levelling 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	-10°C to 50°C
Protection	IP67
Warranty	5 years





# GeoMax Zone20 H

## Automatic entry-level laser rotator

Economic and firm entry-level laser rotator, 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-levelling 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	-10°C to 50°C
Protection	IP67
Warranty	3 years

# GeoMax Zone20 HV

## Automatic multi-purpose laser rotator



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

TECHNICAL DATA	
Functionality	Self-levelling 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	-10°C to 50°C
Protection	IP67
Warranty	3 years



# GEOMAX LAND-LEVELLING SYSTEMS

Shaping and levelling land is an important day-to-day aspect in both the agriculture and construction industries.









# GeoMax Zen Series

Get the most out of your land



With its different control boxes, receivers as well as masts - the ZEN20-60 machine guidance system provides a wide variety of options that can be tailored to specific customer needs. These options are not just limited to hardware variants but also the ability to have customised settings. To make sure that the blade moves exactly how and when it ought to, the valve speed settings and the sensitivity can be independently selected and adjusted to match your machine.

The small size and versatile mounting bracket simplifies the installation of the control box - just hook up the cables and

the panel is ready to operate. At the push of a button the visual grade information is shown on the display. The blade movement can then be controlled manually or automatically allowing for easy and precise execution of rough as well as fine grading applications.

The ZEN20-60 Land-Levelling System is the perfect system for agriculture and building and construction / land levelling customers. **Zone80 DG** is the perfect match to complete the system.



**Zen20**  
Remote Display



**Zen40**  
Control box



**Zen50**  
Control box



**Zen60**  
Control box



**Zen30**  
Receiver with battery



**Zen360°**  
Receiver



**Manual Mast**



**Telescope  
PowerMast**



**PowerMast with  
built-in receiver**





CONTROL BOXES	ZEN20	ZEN40	ZEN50	ZEN60 DUAL
Digital display	-	-	Digital Display Inches, Ft, Metric	-
Automatic Hydraulic control	-	Proportional, ON-OFF, Danfoss valve	Proportional, ON-OFF, Danfoss valve	Proportional, ON-OFF, Danfoss valve
Survey Data collection	-	-	RS232 data port ASCII format	-
Power source	10V to 30V DC	10V to 30V DC	10V to 30V DC	10V to 30V DC
Operating temperature	-4°F to +158°F -20°C to +50°C	-4°F to +158°F -20°C to +50°C	-4°F to +158°F -20°C to +50°C	-4°F to +158°F -20°C to +50°C
Environmental	Water, dust, shock and vibration proof	Water, dust, shock and vibration proof	Water, dust, shock and vibration proof	Water, dust, shock and vibration proof

RECEIVERS	ZEN360°	ZEN30 WITHOUT BATTERY	ZEN30 WITH BATTERY
Capture height	7.5"/19cm	8"/23cm	8"/23cm
Brightness control	-	On/Off/Dim	On/Off/Dim
Power source	Machine 10V to 30V	Machine 12V/24V	4xD cell Alkaline (40h)/NiCd (20h)
Accuracy*	+/-0.1"(4mm) Depending on machine tightness	+/-0.1"(4mm) Depending on machine tightness	+/-0.1"(4mm) Depending on machine tightness
Operating temperature	-4°F to +158°F -20°C to +50°C	-4°F to +158°F -20°C to +50°C	-4°F to +158°F -20°C to +50°C
Environmental	Water, dust, shock and vibration proof	Water, dust, shock and vibration proof	Water, dust, shock and vibration proof
Range	2000ft/600m	2000ft/600m	2000ft/600m
Size	11.5"x3.75"/29cmx9.5cm	12"x6.25"x8.5"/31cmx16cmx22cm	12"x6.25"x8.5"/31cmx16cmx22cm



A large black pipe with an orange interior is being installed in a trench. The pipe is positioned horizontally, with its end facing the viewer. The trench is filled with yellowish-brown soil and some rocks. In the background, there are more pipes and a metal grate. The overall scene is a construction site for a pipeline.

## 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  $\pm 10$  arc sec. accuracy during levelling works and a grade setting control of up to 0.001 per cent, Zeta pipe lasers let you work close to error-free.

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

## SELF-LEVELLING

Set the pipe grade from -10 per cent to +40 per cent.

## VERSATILE CONFIGURATION

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

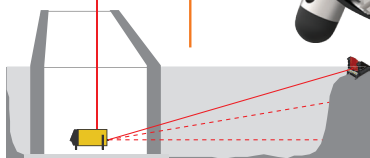
"S" Series manual alignment and automatic dual axis compensation

Pivot point and 5/8" thread

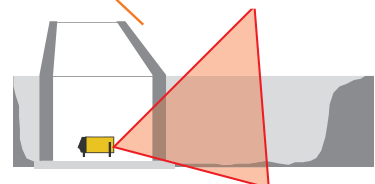
Large and easy-to-read display



Remote control



"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 125mm (5") diameter. Thanks to its weight and the rubber feet, Zeta laser series have a stable stand on any pipe material.

125mm/5"



150mm/6"



200mm/8"



250mm/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 intuitive guesswork or costly and difficult-to-install-and-operate machine control systems. GeoMax has an easy and accurate way to guide excavators.









# 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	200m
Accuracy	Fine 6mm Coarse 30mm
Reception angle	240°
Reception height	14cm
Power	3 x AA batteries, 1,5V
Battery life	130h
IP protection	IP67
Weight w/o battery	2.2kg
Size	220x120x100mm

# 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, signalling of the stick and signals if it is plumb or under/over extended. The remote display shows direction arrows for plumbing up the dipper stick.

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

Clamp mount also available.

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

TECHNICAL DATA	
Range	200m
Accuracy	Fine 6mm Coarse 12mm
Reception angle	360°
Reception height	25cm
Power	NiMh rechargeable batteries
Battery life	130h
IP protection	IP67
Weight w/o battery	1.8kg
Size	375"x75x107mm









# GEOMAX CABLE LOCATORS

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







# X-PAD VU

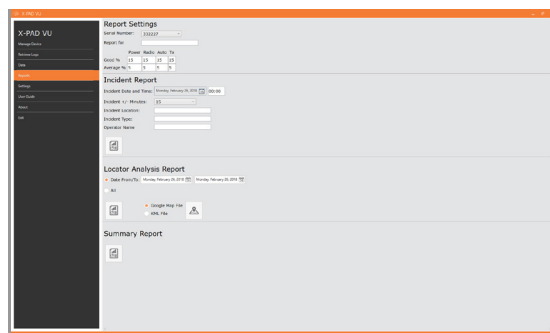
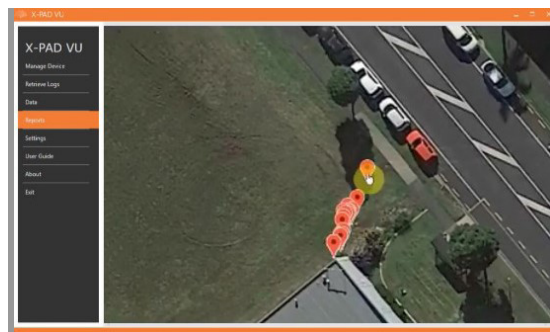
X-PAD analyses data collected and stored by the GeoMax locators.

X-PAD VU allows an easy analysis of activity data from one or more EZiCAT cable locators. Simply download the data via Bluetooth® to see how the data survey was conducted and issue reports of the collected data. The software can be used with all EZiCAT i700 as well as previous models of EZiCAT i600 Series.

## THE SOFTWARE ALLOWS YOU TO ANALYSE THE FOLLOWING TRACEABLE DATA:

- GPS positioning
- Time and date
- Usage duration
- User identification
- Used detection modes
- Detects buried utilities
- Calibration dates displayed

X-PAD VU gives you a map view of the GPS enabled locators, detailed dashboard analysis providing detailed summary and incident reports.





# GeoMax EziSystem

Increase safety, decrease costs

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



## 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.



## 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



The background of the entire page is a photograph of several construction hard hats. In the foreground, a bright yellow hard hat is partially visible on the left. Behind it and to the right, there are orange and white hard hats. They are resting on a light-colored wooden surface, possibly a workbench or floor. The lighting is warm and bright, creating a professional and industrial feel.

## **GEOMAX ACCESSORIES & QUALITY MANAGEMENT**

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







# 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.



**ZTW100**

- Wooden tripod
- shoulder strap and side clamp screws
- packaged length 104cm  
extended length to 166cm
- weight 5.7kg



**ZTA100**

- Aluminium light weight tripod
- shoulder strap and side clamp screws
- packaged length 105cm  
extended length 167cm
- weight 4.5kg



**CT160**

- Aluminium tripod
- shoulder strap and screws
- Range from 103cm  
up to 167cm
- medium weight



**ZCA102**

- Reflector carrier
- tubular level
- optical plummet for precise positioning



**ZCA100**

Tribrach carrier for GNSS antennas.



**ZCA101**

Tribrach carrier with stub for prisms.





### ZPC200

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



### ZPC201

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



### ZPC202

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



### ZST100

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



### ZPT4

- Mini TPS pole
- four screwable segments
- Extends to 30cm
- with a pin

## TOTAL STATION, CONTROLLER & DIGITAL LEVEL CABLES

<b>Zipp10 Pro/Zoom40</b>	USB	Cable mini-USB to USB host connecting to a PC/tablet	ZDC301
<b>Zoom25/50</b>	USB	Cable Lemo-USB connecting to a PC/tablet using USB transfer technology	ZDC217
<b>ZDL700</b>	USB	Cable: Lemo-USB connecting ZTS600 & ZDL700 to PC/tablet	ZDC102

## GNSS CABLES

<b>ZENITH15/25 PRO</b>	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
<b>ZENITH35 PRO</b>	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



# GeoMax Accessories



**ZRP1**  
360° prism with soft bag.



**ZMP100**

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



**ZTR101**  
Standard tribrach without optical plummet.

**ZTR103**  
Standard tribrach with optical plummet.

**ZTR201**  
Advanced tribrach without optical plummet.

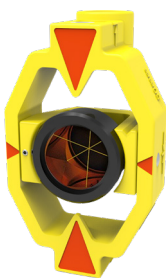


**GRZ122**  
360° prism with 5/8" for GNSS antenna.



**ZPR100 AND ZTP100**

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



**ZMP101**  
Mini prism with tip.

## GSS111

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

## GSS113

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

## CLR102

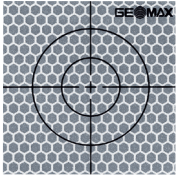
- Level staff 5m
- 4 sections
- front side with E-graduation
- back side with mm-graduation

## FLEXI ROD

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







#### ZTM100

- Self-adhesive reflective target 6x6cm
- For measurement of surfaces standard EDM



#### ZDE100/GFZ4

Diagonal eyepiece.



#### ZST101

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



#### LI-ION BATTERIES

- ZBA301 for Zipp10 Pro/Zoom40 total stations, 4.4Ah
- 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



#### ZCB100

Backstrap for hard shell containers.



#### ZCT102

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



#### MW24

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



# 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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# GeoMax Selection of our portfolio:



X-PAD Ultimate



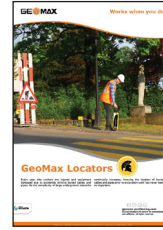
Total Stations



GNSS



Laser Rotators



Locators



Zoom3D



Zeta125 Series



Zenius5 W



Digital level



Land-levelling  
Systems

*"The GeoMax Zenith15 combined with X-PAD Software is a great combination. We find X-PAD Software very user-friendly and the Zenith15 GNSS gives great results every time. Our GeoMax representative took great care to train our staff and ensure seamless transfer to our survey software"*

**MK Surveys**

*"The team is always happy to take a call and offer fast effective solutions to problems in the field and arrive quickly on site to get you back to work. Their level of service is rare."*

**Derek Kilbride Ltd**

*"The Geomax Zoom 90 is a fantastic piece of equipment, the functionality and ease of use of the X-PAD software ticks all the boxes."*

**Jonathon Weaver, Senior Engineer. JJ Mullins Civil Engineering Ltd**

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