GeoMax General Catalogue

PART OF HEXAGON

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 Europe, our technology is supported by a broad sales, support and service network covering all continents.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR.

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.

WE PROVIDE INNOVATIVE MEASUREMENT EQUIPMENT

Unmatched user-friendly solutions and extensive hands-on support, for surveying and construction professionals worldwide.

We listen to our partners, understand the markets and answer the local needs of our customers to make their work easier thanks to a fully accessible and dedicated team worldwide.

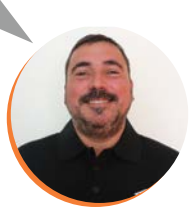
"Thanks to the regular Global Training sessions, we have the opportunity tp discuss customers' needs, which are taken into account for future product development."

Dior Siteke
Authorised
GeoMax Dealer

"Using X-PAD is the easiest way to survey. You can work with all of your equipment using only one software."

Bruno Krenski
End customer
from Brazil

"Since we started working with GeoMax, our company has grown significantly. Working with the GeoMax team is very pleasant. They are always available to talk to people. This is the key differentiator to other companies."



Mario Silva
Authorised
GeoMax Dealer

2
Operational centres

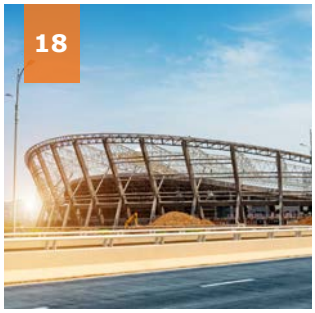
3
Strategic partners

270
dealers

Our 270 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 and training team.

Content

TOTAL STATIONS

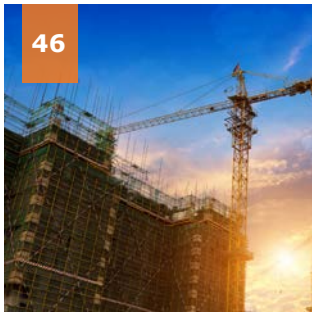


GNSS RECEIVERS

FIELD CONTROLLERS

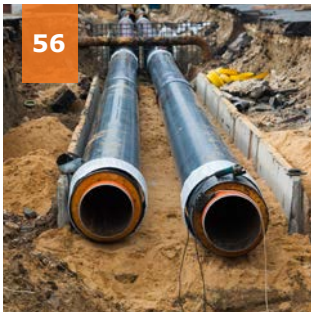
SOFTWARE

MICRO ROBOTIC SOLUTION



LEVELS

LASER ROTATORS & RECEIVERS



PIPE LASERS

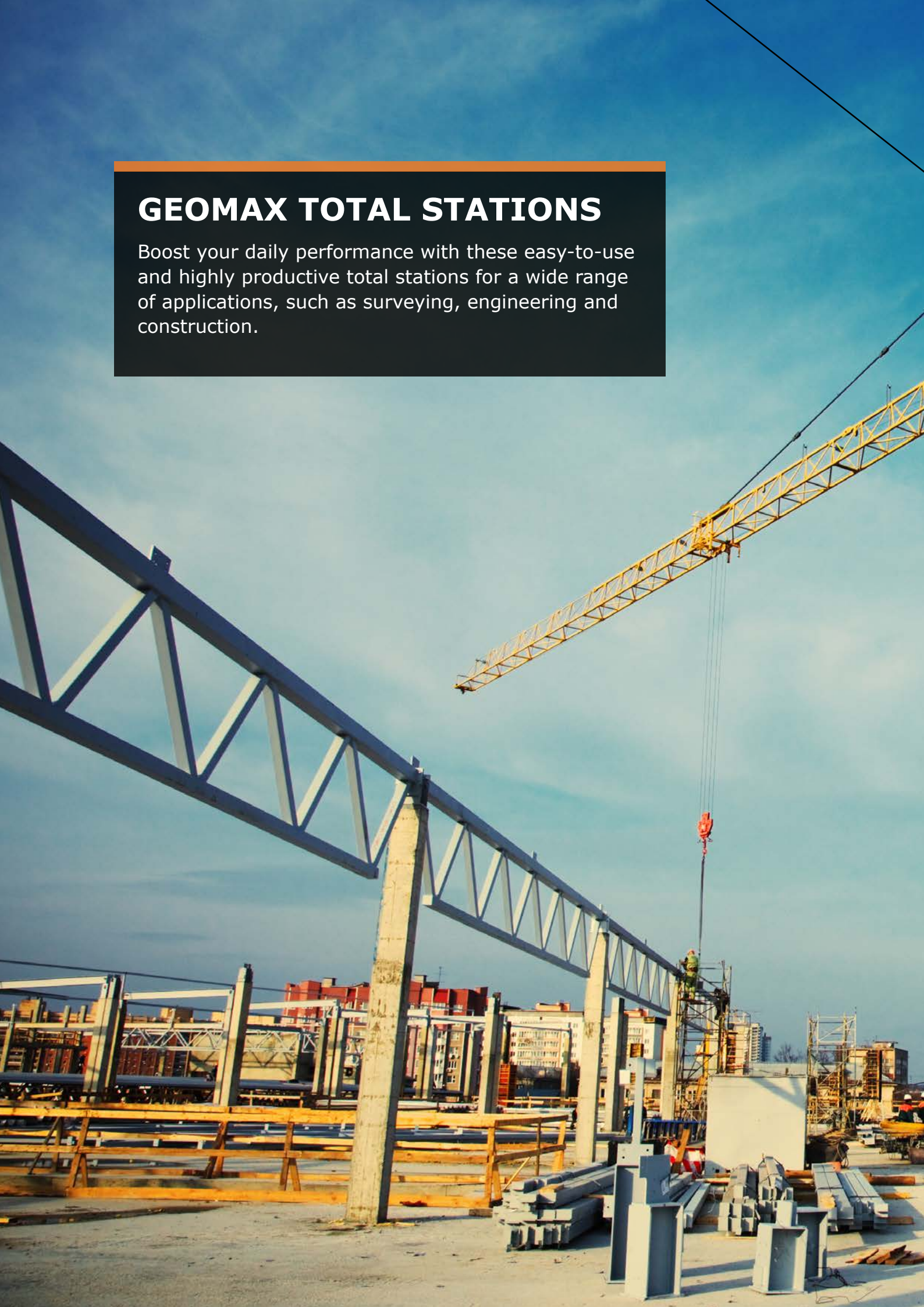
MACHINE GUIDANCE

CABLE LOCATORS

ACCESSORIES & QUALITY MANAGEMENT

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.



X-PAD


GEOMAX
Survey001
11:27
0.019m
0.014m
-0.913m
0.023m
1.800m
Accept
Measure
Bluetooth
ESC
FNC
F1
F2
F3
F4
F5
F6
accXess 10

GeoMax Zoom90 Series

The ultimate one-man system

STREAM360: FULLY ROBOTIC

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

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

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

X-MOTION™ HYBRID DRIVES

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 X-PAD and a variety of other 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	TRack	Aim	accXess IO	accXess S
Robotic (R)	✓	✓	✓	✓	✓

TECHNICAL DATA	
Accuracy	5", 2", 1"
Range with prism (standard mode)	3,500m
Accuracy (standard mode)	1mm + 1.5ppm
Range with prism (long mode)	10,000m
Accuracy (long mode)	5mm + 2ppm
Non-prism (range, accuracy)	1,000m/500m, 2mm + 2ppm*
Scout range	300m at round prism
TRack range	800m at round prism
AiM range	1,000m at round prism

* > 500m: 4mm + 2ppm

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 X-PAD and a variety of other powerful field software to be run, offering you freedom to choose software that best suits your needs.

TECHNICAL DATA	
Accuracy	5", 2", 1"
Range with prism (standard mode)	3,500m
Accuracy (standard mode)	1mm + 1.5ppm
Range with prism (long mode)	10,000m
Accuracy (long mode)	5mm + 2ppm
Non-prism (range, accuracy)	1,000m/500m, 2mm + 2ppm*
TRack 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

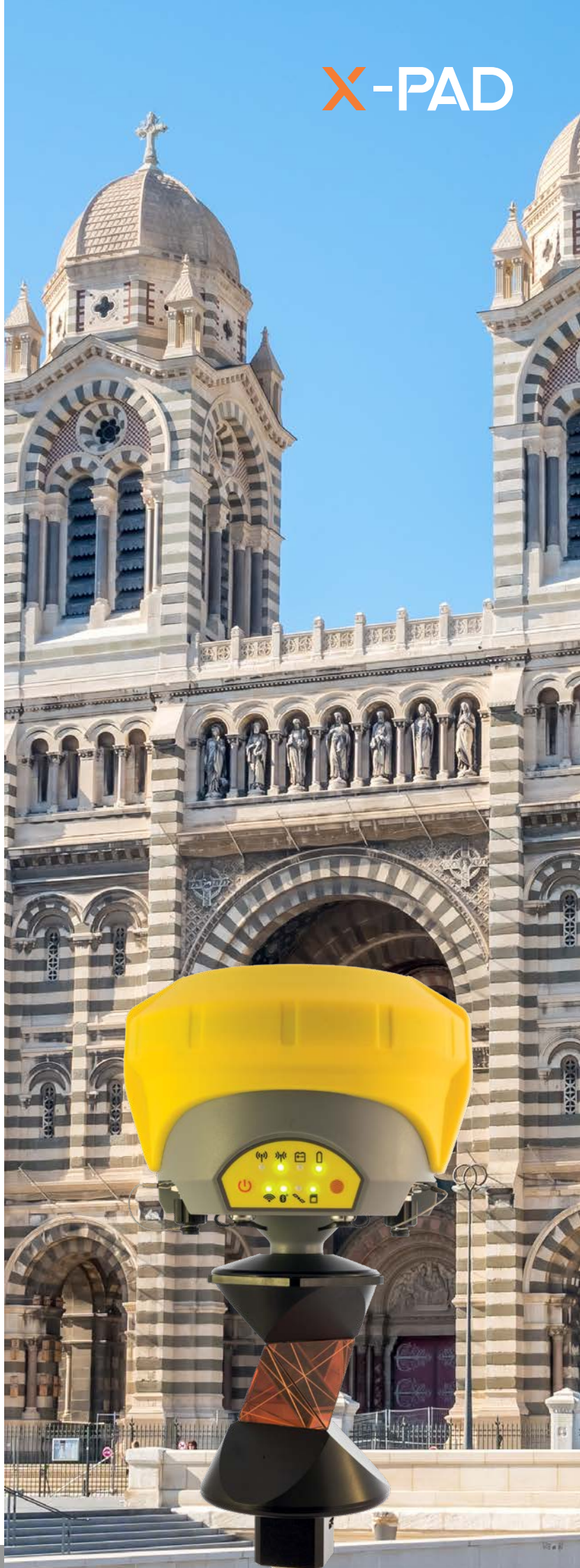
By combining the advantages of both systems, the new GeoMax X-Pole solution significantly improves performance and flexibility on the jobsite.

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
13:05 Circular 1
2D-AREA&VOLUME RESULT
Page 1 Page 2
Pts 12
Area 0.611 ha
Area 6105.462 m2
Per. 309.026 m
Vol. ------
New
AddTg
F1
F2
F3
F4
Bluetooth

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.

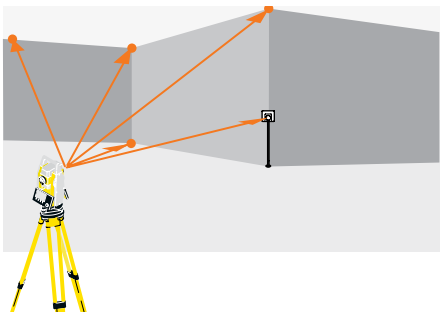
TECHNICAL DATA	
Hz, V Standard deviation (ISO 17123-3)	1", 2", 5"
Compensator system	Quadruple-axis compensation
Measuring range with prism	10,000m
Accuracy on reflector (Fine/Tracking)	2mm + 2ppm/3mm + 2ppm
Reflectorless range accXess5	>500m
Reflectorless range accXess10	>1,000m
Accuracy reflectorless	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 o☐ering 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
ZOOM40
GEOMAX
MAIN MENU
1 Survey 2 Settings 3 Tools
4 EXIT
F1
F2
F3
F4


GEOMAX
ZOOM25
GEOMAX
MAIN MENU
1 Apps
2 Data
3 Settings
4 R-SURVEY
5 Trans
6 Tools

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.

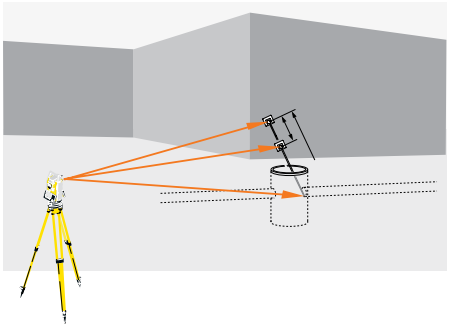
BUILT FOR ALL ENVIRONMENTS

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.



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

When looking for the best price performance ratio

EASY CONNECTIVITY

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

PERFORMANCE, ROBUSTNESS

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

MULTIFUNCTIONAL KEYBOARD

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

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 ZPP10 R2

Distance measurement on reflector 250 m non-prism distance.

GeoMax Zipp02

Digital theodolite for all your general construction tasks

CLOSING THE GAP

With vertical compensation and 2” accuracy the Zipp02 provides you with the precision required for your most demanding jobs at an affordable price without adding complexity. Various display modes, hold and set zero for horizontal angle, a variation of measurement units, simple distance measurement via stadia lines all make for easy operation with only six keys. Visible laser plummet enables you to set up over a point faster and easier than ever. The Zipp02 is the tool of your choice when it comes to checking angles, alignments, grade work and short range levelling.

TECHNICAL DATA	
Precision	2”
Magnification	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 Zenith40

Experience the full GeoMax technology

SUPERIOR POSITIONING

Take advantage of NovAtel's latest fully-featured OEM 719 measurement engine. It enables you to receive multi-frequency signals form all existing satellite systems worldwide. Struggles with canopy - like working under trees, or inaccurate results because of multipath signals are significantly improved 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 centimetre level quality all around the globe. This service significantly enhances your productivity, as it eliminates the need of a 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 AND FLEXIBLE CONFIGURATION

The Zenith40 provides greatest flexibility. 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.

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 up your connection process. Forget the times of tedious sensor search and selection by toggling through extensive device lists. Simply scan and go!

TECHNICAL DATA	
Channels	NovAtel OEM7, 555 channels, multi-frequency / -constellation
Satellite signals	GPS L1, L2, L2C, L5 GLONASS L1, L2, L2C, L3* BeiDou B1, B2, B3* (opt) Galileo E1, E5a, E5b, AltBOC, E6* (opt); QZSS L1, L2C, L5, L6* (opt); NavIC L5*
Positioning rate	5 Hz, 20 Hz (opt)
Accuracy RTK (rms)**	Hz 8 mm + 1 ppm V 15 mm + 1 ppm
Accuracy Static (rms)**	Hz 3 mm + 0.5 ppm V 5 mm + 0.5 ppm
Accuracy Static - long (rms)**	Hz 3 mm + 0.1 ppm V 3.5 mm + 0.4 ppm
Accuracy TerraStar C Pro PPP (rms)**	Hz < 2.5 cm V < 5 cm

* Glonass L3, BeiDou B3, Galileo E6, QZSS L6 and NavIC L5 are foreseen to be provided through future firmware upgrade.
** Measurement precision, accuracy, reliability and time for initialisation are dependent upon various factors including number of satellites, observation time, atmospheric conditions, multipath etc. Figures quoted assume normal to favourable conditions. A full BeiDou and Galileo constellation will further increase measurement performance and accuracy.

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	
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**; EGNOS;WAAS,MSAS,GAGAN, QZSS
Positioning rate	5Hz, 20Hz****
Accuracy RTK (rms)***	H 8mm + 1ppm V 15mm + 1ppm
Accuracy Static (rms)***	H 3mm + 0.5ppm V 5mm + 0.5 ppm
Accuracy Static - long (rms)***	H 3mm + 0.1ppm V 3.5mm + 0.4ppm

*Glonass L3 will be provided through future firmware upgrade.
**Believe to comply. Subject to ICD description availability. The position accuracies depend on various factors including the number of satellites, geometry, ionospheric, conditions, multipath, etc
***Measurement accuracy and reliability are dependent on various factors including satellite geometry, obstructions, observation time, ionospheric conditions, multipath, etc.


X-PAD
GEOMAX

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 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	
Channels	120, dual frequency
Satellite signals	GPS L1, L2, L2C; GLONASS L1, L2; SBAS
Positioning rate	5Hz
Accuracy RTK (rms)*	H 10mm + 1ppm V 20mm + 1ppm
Accuracy Static (rms)*	H 5mm + 0.5ppm V 10mm + 0.5ppm
Accuracy Static - long (rms)*	H 3mm + 0.1ppm V 3.5mm + 0.4ppm

GPS GLONASS SBAS IP68 3.75G GSM UHF

* 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 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
GPS tracking	L1, L2, L2C	L1, L2, L2C, L5		L1, L2, L2C, L5
GLONASS tracking	L1, L2	L1, L2, L3*		L1, L2, L3*
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.

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 A

The X-PAD Ultimate user experience

POWERFULL AND ROBUST

Operating on Android the ZeniusX field controller is versatile and fully equipped to make data collection easy. A clean and detailed site documentation is guaranteed thanks to the 8MP high resolution camera.

The rugged device is dust-tight and withstands temporarily immersion under water (IP67). Customisable keys for quick access and a large, crystal clear display make your job more convenient.

YOUR PERFECT MATCH IN THE FIELD

The dedicated GeoMax field software X-PAD Ultimate and the ZeniusX are the perfect match when it comes to your everyday job in the field.

KEY FEATURES:

- Android Operating System
- 4G LTE cellular modem
- 4.3” wide VGA sunlight readable display
- 8 megapixel camera with auto-focus
- Large memory - 1GB RAM, 8GB storage
- MicroSD card support
- Class 2 Bluetooth® 4.1 + Bluetooth® LT, WiFi and USB Typ-C connectivity
- Multi-constellation GNSS
- Light weight – 490g including battery
- Vibration resistant according MIL standard

X-PAD

TECHNICAL DATA	
Processor	Qualcomm(R) SnapdragonTM Quad Core, 1.1 GHz
Operating System	Android 6.0.1 (Marshmallow)
Memory	1 GB program memory; 8 GB storage capacity
Display	4.3" Wide-VGA sunlight readable TFT with a 480 x 800 resolution
Battery	Removable Li-Ion smart battery; 3400 mAh 7.4V 25.2 Wh
Operating time	Up to 16 hours
Navigation	GPS, GLONASS, BeiDou; single frequency
Features	WIFI, Bluetooth®, Inbuilt GPS, 4G LTE cellular modem, High speed USB Type-C OTG port, MicroSD Card slot
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."

TECHNICAL DATA	
Processor	TI Sitara™ AM335x running at 1 GHz
Operating system	Windows® embedded handheld 6.5 Professional
Memory	512MB program memory, 8GB storage capacity, MicroSD card slot
Display	Full VGA sunlight readable TFT with a 480 x 640 resolution
Battery	Removable Li-Ion smart battery; 3400 mAh 7.2V 24.48 Wh

TECHNICAL DATA	
Operating time	Up to 10 hours
Navigation	GPS, GLONASS, BeiDou, Galileo; single frequency
Features	WIFI, Bluetooth®, Inbuilt GPS, 4G LTE cellular modem, High speed USB Type-C OTG port, MicroSD Card slot
Camera	Auto focus 5 MegaPixel

	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(R) 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(R) 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(R) 4.1 + Bluetooth(R) 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 Sinusoidal: 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

Windows Mobile

GeoMax FZ-M1 & Zenius800

For your success on the modern job site

ZENIUS800 - EQUIPPED FOR YOUR EVERYDAY TASKS

GNSS or TPS, stakeout or topographical survey - the Zenius800 is the optimal datalogger for every task in the field. Working with CAD drawings or 3D models is simple and intuitive, thanks to the big screen that provides an overview of the complete picture. Make changes directly in the field so no need to go back to the office. Uploading time for large data files is minimized thanks to the high- performance octaprocessor.

The tablet's internal Bluetooth connects to robotic total stations with radio handle up to a radius of 300m. This allows an uninterrupted remote workflow due to the stable Bluetooth connection.

FZ1-M1 - DESIGNED FOR PROFESSIONALS

The FZ-M1 is 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 and Bluetooth. The FZ-M1 will boost your performance no matter the challenge you face.

FULLY RUGGED

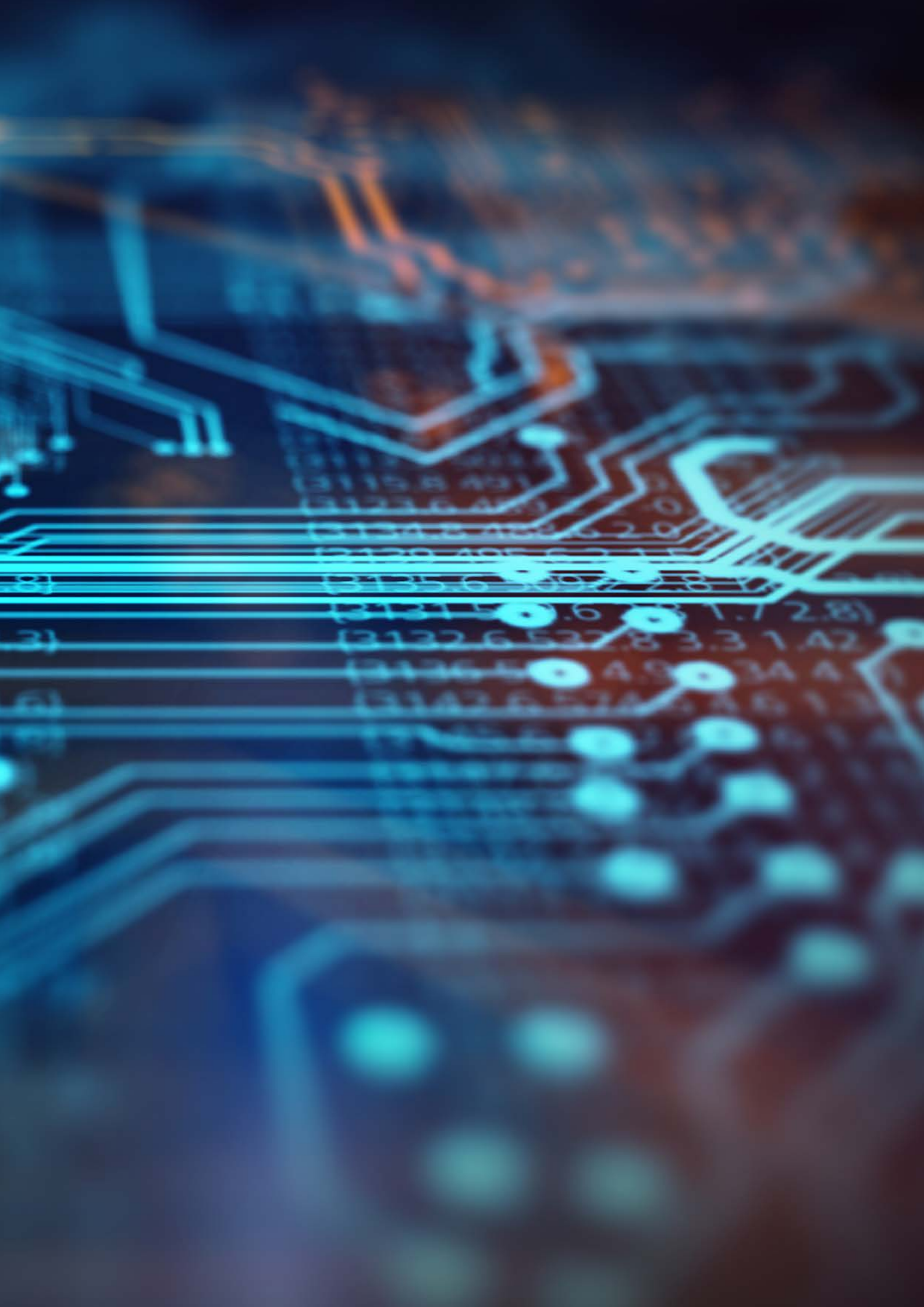
These tablets do not need to hide outdoors. Their multi-touch and sunlight-viewable screen allows you to interact with it without even taking off your gloves. And because accidents in the field can happen, these tablets are also shock resistant and water and dust proof.

	FZ-M1	ZENIUS800
Processor	Intel Celeron®. N2807 processor 1.58GHz 1MB L2 Cache	Qualcomm® SnapdragonTM 626 incorporating 8 Cortex-A53 cores up to 2.2 GHz each
Operating system	Windows® 8.1 Pro	Android 8.0 Oreo
Memory	2GB	4GB
Display	7" sunlight-viewable WXGA Active Matrix (TFT) IPS LCD with circular polariser (up to 500cd/m brightness); multi-touchscreen	8" Sunlight readable HD display with 1280 x 800 resolution and protected by Corning® Gorilla® Glass
Battery	Lithium-Ion (7.2V, 3320mAh)	8200 mAh 3.8 V Lithium-Ion battery (31.16Wh)
Operating time	Up to 7 h	Up to 15 hours
Camera	2 MP front/5MP rear	5MP front fixed focus/13MP rear with auto-focus
Features	WIFI, Bluetooth® 4.0, 4G LTE, USB, GPS external antenna connector	WIFI, Bluetooth®, Inbuilt GPS, 4G LTE cellular modem, High speed USB Type-C OTG port, MicroSD Card slot

X-PAD

GEOMAX SOFTWARE

GeoMax software solutions cover a wide range of professional surveying and construction applications. They are aligned to the workflows on sites, local needs and guide you through your task fast and intuitive.



GeoMax X-PAD Ultimate

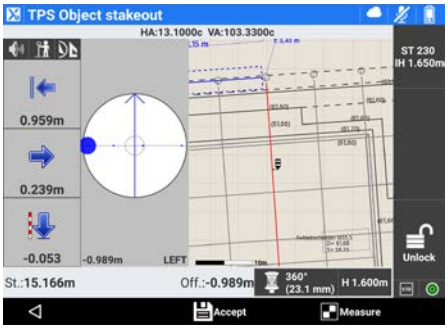
The Ultimate solution in the field

X-PAD Ultimate ensures high productivity in the field. It supports perfect integration in your measuring instruments. Running on Android devices, it brings latest technologies to topography: a full 3D viewer, use of TPS, GNSS and other sensors, integration of your data into maps, in the camera for augmented reality, direct data exchange with cloud platforms, voice commands and much more. It is available in two tailored versions: one for surveyors and one for construction professionals.

Survey

X-PAD Ultimate Survey is the best solution for professional surveyors that need 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 instruments.

Build



X-PAD Ultimate Build is the ideal solution for all your construction measuring and layout needs. It combines data collection from the total station or the GNSS, allowing you to perform the measurement, stakeout and as-built with simple and functional procedures.

X-PAD Build is a special and tailored version of X-PAD Survey, from which inherits all the main features and functionalities, but differs because it is specifically addressed to construction companies. To use X-PAD 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.

Thanks to our product specialists who daily discuss with you, our customers, dealers, end users all around the world, X-PAD Ultimate is kept up-to-date continuously and convinces with its perfect balance between clear structure, straight forward workflows and high functionality.

X-PERT - KEEP X-PAD AT ITS BEST

GeoMax X-PAD software has originally been developed taking your feedback aboard. To ensure that every new software feature is a perfect match with your needs, we exchange with you regularly. With SHIELD and X-PERT you receive new services that ensure you benefit from the latest improvements and have access to all X-PAD Ultimate software releases.

X-PERT

- Latest software releases, adjusted to the latest trends, your workflow and customised to you needs in the field
- Provides all software releases during certain periode automatically
- Delivered with the initial X-PAD Ultimate order
- Free of charge for the first year and can be renewed and purchased after license expiring

SHIELD

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

X-PAD Ultimate offers to both platforms a specific working environment and a set of dedicated features

TOPOGRAPHIC 3D CAD – Real topographic 3D CAD 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 – Use different types of maps, online and offline.

DATA COLLECTIONS. NOT ONLY COORDINATES – Integrate the position, photos and notes to points. Quick Codes to create your own custom panels with the most used codes and measure au-tomatically just after you choose the code.

STAKEOUT... WITH YOUR EYES CLOSED – Voice guidance to arrive at the point without even looking at the display. Large compass to simplify visual navigation. Every drawing element, includ-ing points, lines, arcs and every position, determined within the graphical view to staked out.

ROADING. THE WHOLE PROJECT IN THE CONTROLLER – Load, manage and perform alignment, stakeouts of works such as roads, highways and canals.

TERRAIN SURFACES AND VOLUMES – Can calculate terrain models from the points with the options to define breaklines and boundaries and the cubic metres of an excavation or a pit. Import models from DXF or LandXML files and use stakeout command to determine the design elevations in the field.

AUGMENTED REALITY. TURN ON REALITY! – Point the camera to the site and 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.

BIM – Load and display IFC files in CAD view, survey, stakeout and COGO commands. Select, hide and isolate elements. or isolated. Extract points, lines, surfaces and cross-sections for stakeout and checking operations.

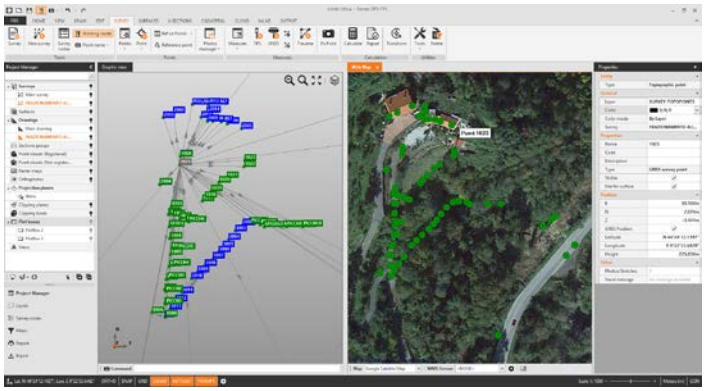
CLOUD AND SHARING POINT. FIELD AND OFFICE, ALWAYS CONNECTED – Open and import any file, also in the cloud. Save your data on Dropbox, GoogleDrive and Microsoft OneDrive and access them from the field or office. Easily share any data via message or email.

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

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 to import the measurements from your instruments and have the full control of all the information to verify at any time the quality of your work; it calculates and solves all kinds of surveys, GNSS, total station, digital level and mixed with the least squared algorithms for precise calculation.

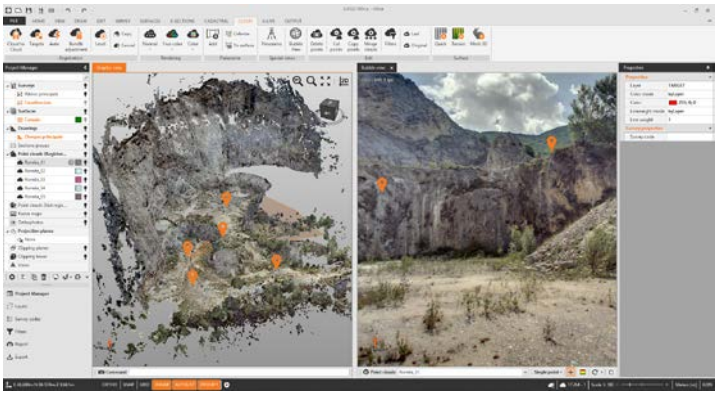
From topographic points or point clouds it is possible to create 3D models, contour lines, calculate cross-sections and volumes using several methods. Powerful tools and options allow you to customize the final drawings to obtain the best results possible for you customers.

BIM CONNECT MODULE

Load and manage IFC files, extract elements for stake-out, and check as-built data with field measurements in the most efficient way.

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 allow 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 generate 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

Efficient calibration for all your lasers

NEW BUSINESS OPPORTUNITIES

The GeoMax X-PAD CalMaster enables you to offer the complete construction laser service package to customers and solidify your professional reputation. Opening new value-added streams of service revenue, you can significantly reduce downtime with your own in-house 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. It enables a highly accurate method to calibrate construction lasers and can be operated without extensive training needed.

COMPLETE THE SYSTEM

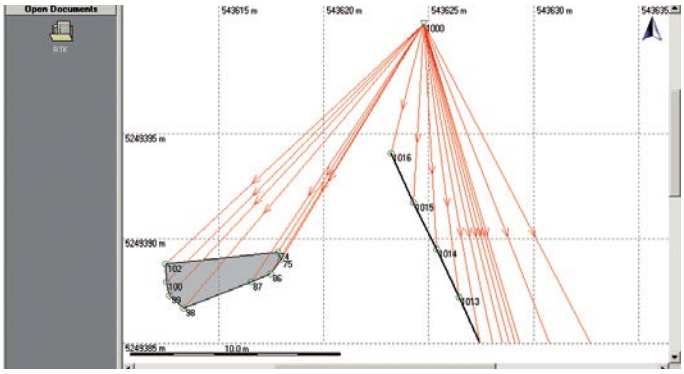
The system runs on a X-PAD software that is well-known in the market for its user-friendliness and intuitive interface. Holding its promise, X-PAD CalMaster guides users step-by-step through the measuring workflow and supports them with instructions for accurate and fast measurements.

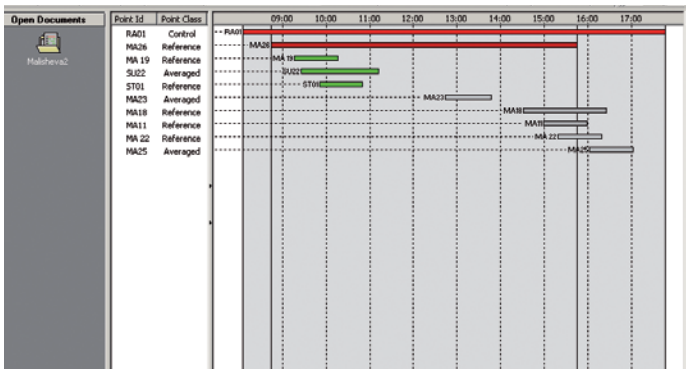
	 GEOMAX ZONE SERIES	 GEOMAX PIPE LASERS	 3RD PARTY LASERS	 3RD PARTY PIPE LASERS	 3RD PARTY LINE/ POINT LASERS
Issue calibration report	✓	✓	✓	✓	✓
Check plane laser beam	✓		✓		✓
Check spot beam	✓	✓	✓	✓	✓
Check grade 0.5%	✓		✓		
Check grade 1.0%	✓	✓	✓	✓	
Check grade 1.5%	✓		✓		
Guided calibration	✓	✓		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

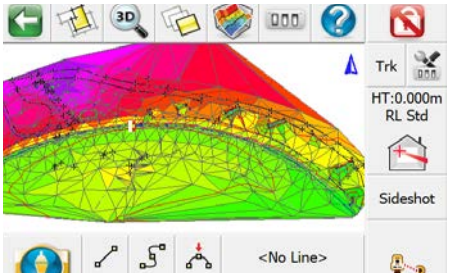
When post-processing of GNSS data is required, GGO provides state-of-the-art technology to guarantee you always produce optimal results. Simply import data, and GGO will automatically process all possible GNSS baselines. Once results are available, they can be presented in customised reports.

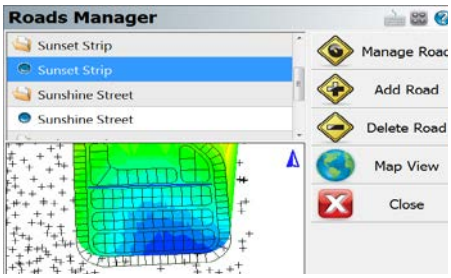
LEAST SQUARES ADJUSTMENT

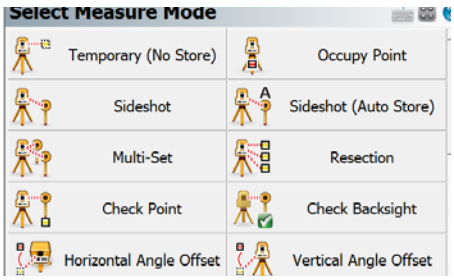
A rigorous 3D least squares adjustment package is available. This option allows the adjustment using least squares of GNSS, total station and combined data by using a variety of different parameters and coordinate systems. The results are stored in well-designed HTML report.

GeoMax FieldGenius Premium

Powerful fiel software for all your daily surveying tasks







DIGITAL TERRAIN MODELING, VOLUMES AND CONTOURING

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

POWERFUL ROADING

FieldGenius roading allows you to manually input or import your alignment data including 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

X-PAD 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 it's 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.

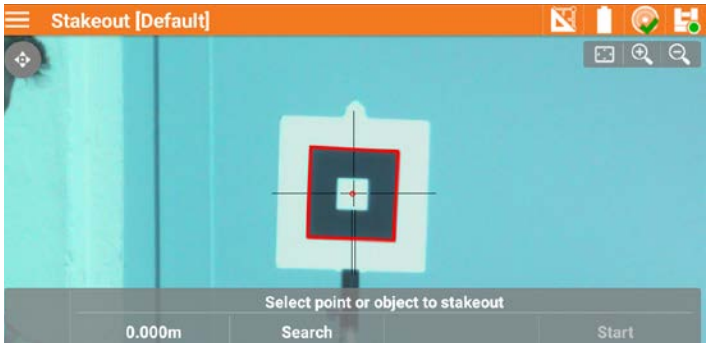
ONE-MAN LAYOUT

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

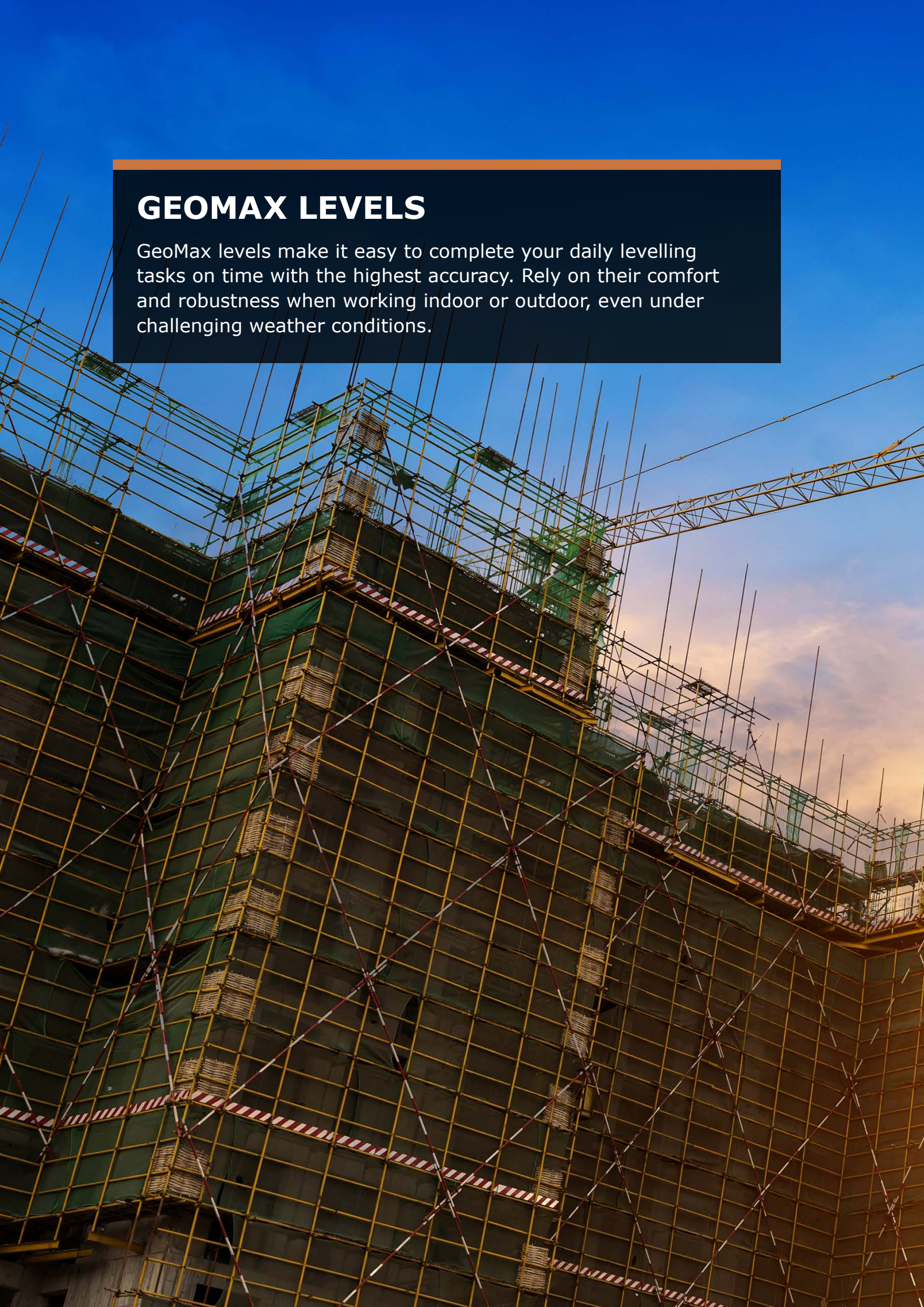
X-PAD MasterPlan features a full range of drawing tools. These features allow you to draw the 3D environment quickly and easily by using the Zoom3D's drawing function. The results can be exported in DXF or ASCII format. Draw 2D and 3D elements with the best results using the X-PAD MasterPlan. Get fast 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 LEVELS

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

GeoMax ZDL700

A digital level offering accurate results and fast operation

QUICK, EASY AND ERROR-FREE

The three-seconds measurement speed in combination with the simplicity of the one-push measure-and-store functionality allows fast and easy workflows.

LEAVE THE CALCULATOR IN YOUR POCKET

Execute all kind 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 usage.

ACCURATE

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

TECHNICAL DATA	
Height accuracy	± 0.7mm/km double run
Distance accuracy	D < 10m, 10mm D ≥ 10m, 0.001 x D
Maximum range	105 m
Single measurement speed	< 3 seconds
Internal memory	2,000 measurements

GeoMax ZAL Series

Automatic levels covering from beginner to expert

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

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

With different types of magnification, an 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 LASER ROTATORS & RECEIVERS

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 laser for all trades and applications.

Solidly built and dependable in any element, the GeoMax lasers provide you long-lasting operation, 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 Zone80 DG

Fully-automatic dual grade laser

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 catch and Lock function
Operating range (diameter)	1100 m / 3000 ft
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	2 years

GeoMax Zone60 DG

Fully-automatic dual grade laser

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

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

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°
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 HV

Automatic multipurpose laser rotator

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

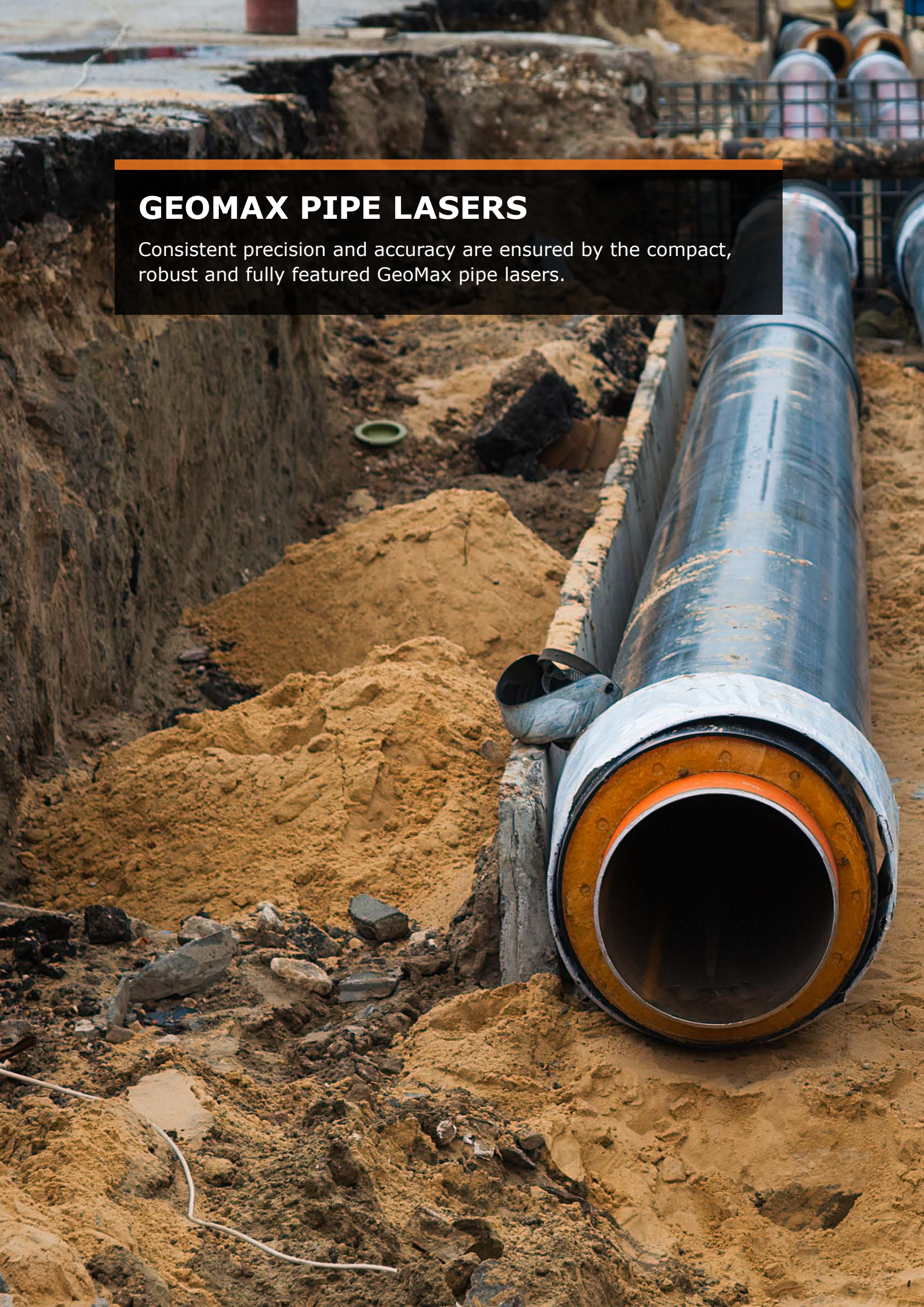
TECHNICAL DATA	
Functionality	Self-levelling horizontal, vertical, 90° manual slope in dual axis
Operating range (diameter)	900m/3000ft
Self-levelling accuracy	±2.2mm at 30m (±3/32" at 100ft)
Self-levelling range	±5°
Rotation speed	120, 300, 600rpm
Scanning modes	10° - 35°
Laser diode type/class	635nm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

GeoMax 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°
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 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 designed for tough conditions

BUILT TO LAST

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

ERROR-FREE WORK

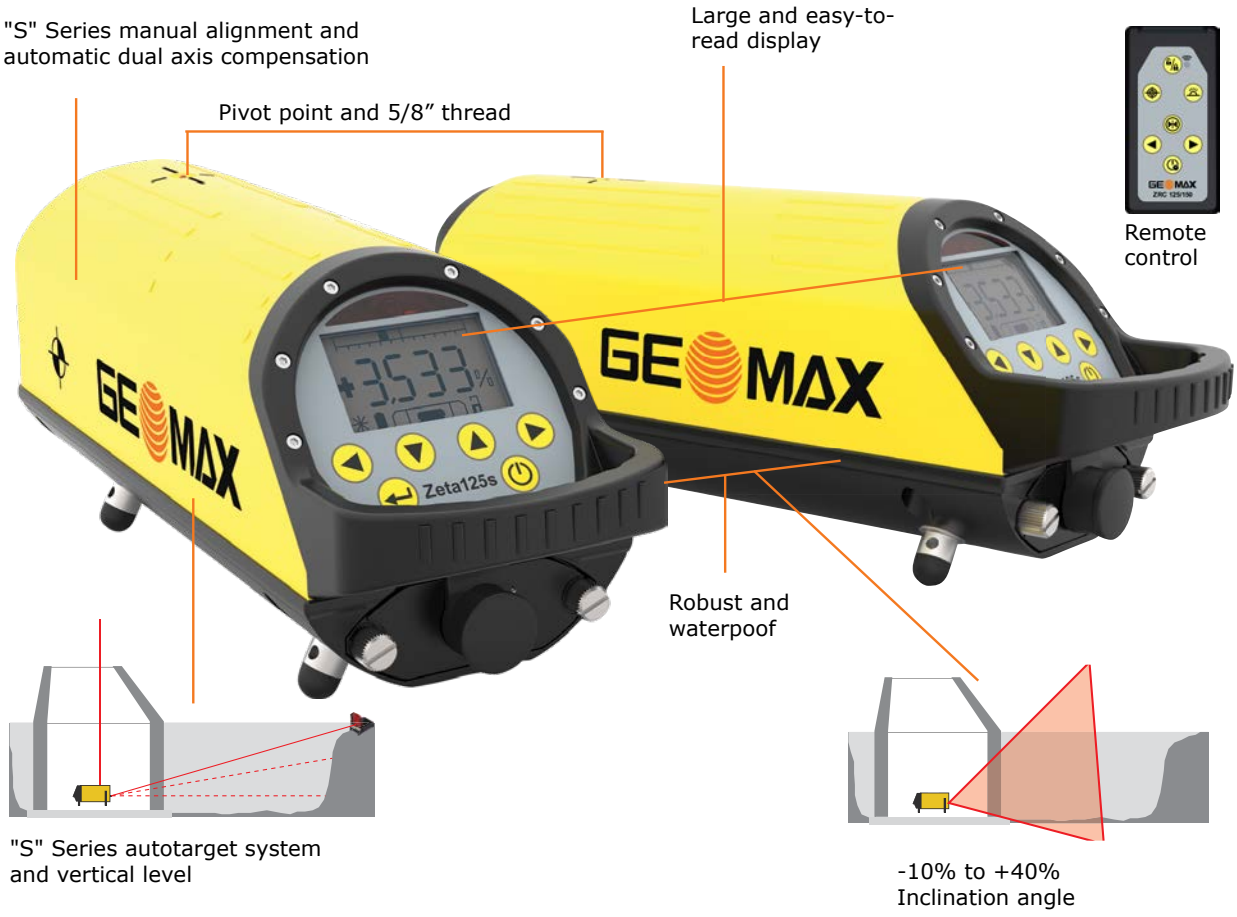
Pipelaying needs to be exact over long distances so with a guarantee of ±10 arc sec. accuracy during levelling works and a grade setting control of up to 0.001 per cent, Zeta pipe lasers let you work close to error-free. In addition to the accurate levelling core, Zeta125s model features active cross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

SELF-LEVELLING

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

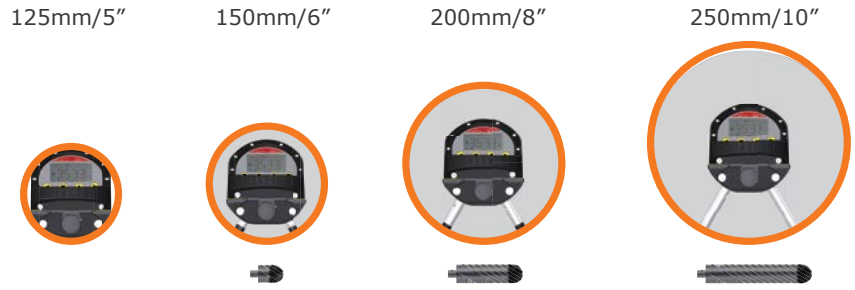
VERSATILE CONFIGURATION

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.



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.



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.

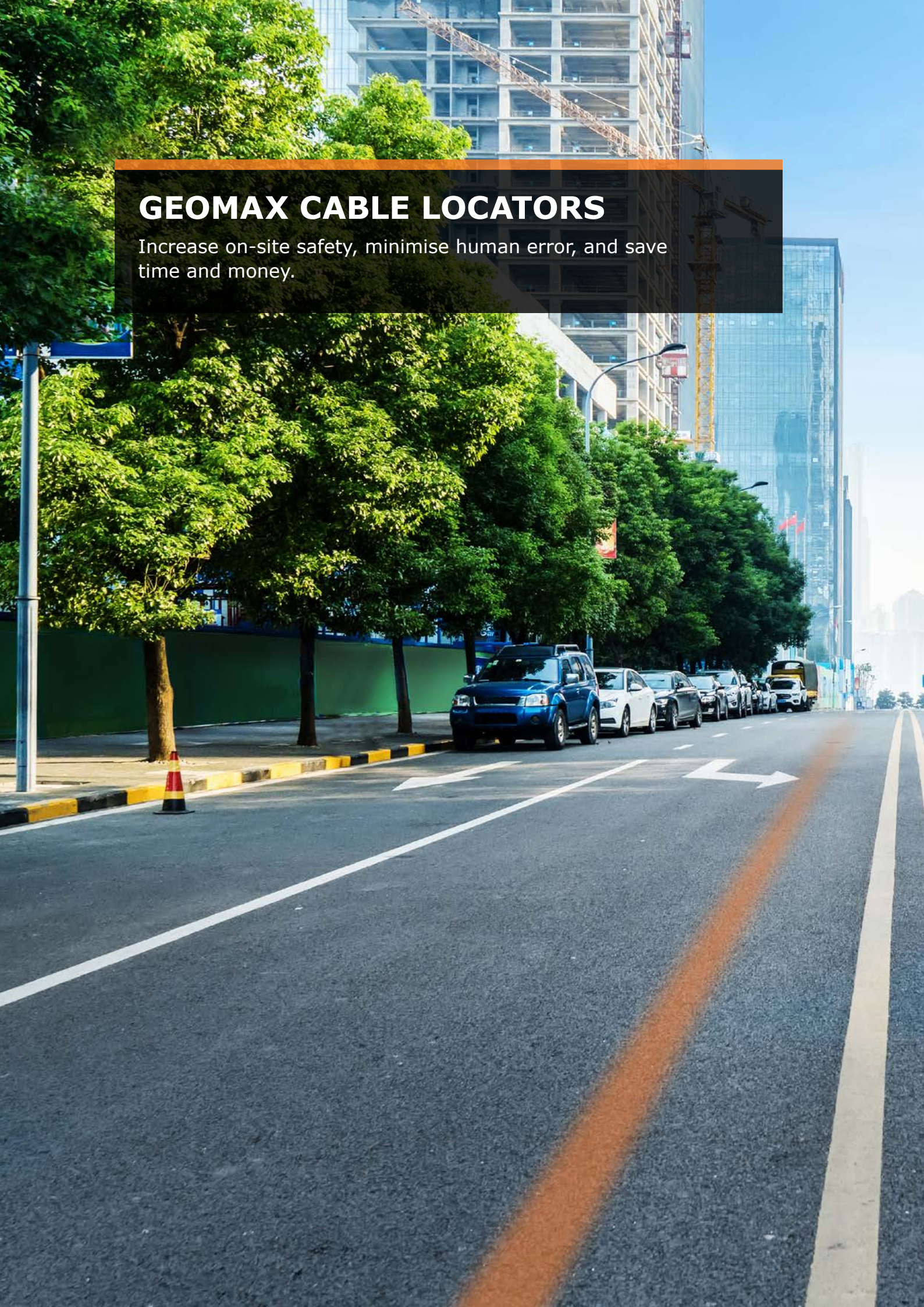
Its receiver has plumb LED indicator, and its magnet mount allows quick setup and easy movement from machine to machine.

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


Keller



GEOMAX CABLE LOCATORS

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


GEOMAX
EZiCAT
i500
Cable Avoidance Tool
GEOMAX
i100
EZiTEX

GeoMax EziSystem

Increase safety, decrease costs

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

EZISYSTEM I-SERIES

Easily avoid buried cables and pipes before excavation work

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

EZISYSTEM XF-SERIES

Easily locate and trace buried utilities over greater distances

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

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

X-PAD VU - CABLE LOCATOR SOFTWARE

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

The software allows to analyse the following traceable data:

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

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

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			
Zoom10		USB Cable for Zoom10	ZDC10
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

GeoMax Accessories

ZRP1

360° prism with soft bag.

GRZ122

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

ZMP100

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

ZPR100 AND ZTP100

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

ZTR101

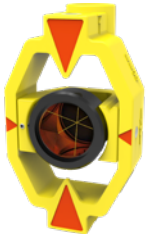
Standard tribrach without optical plummet.

ZTR103

Standard tribrach with optical plummet.

ZTR201

Advanced tribrach without optical plummet.



ZMP101

Mini prism with tip.

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
- ZBA10 Li-Ion Battery 7.4V for Zoom10
- 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

- ZCH10 charger & ZAD10 adapter for ZBA10
- 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

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

GeoMax Services

GEOMAX ACADEMY

Within the GeoMax Academy, the company offers excellent training opportunities for GeoMax dealers. Training is provided worldwide with a focus on hardware and software. Training sessions take place in a variety of locations around the world and feature detailed information about applications and products within the GeoMax portfolio. Training takes account of the latest technological advances in the survey and construction business. Training is also carried out regionally, to cover specific requests. A dedicated team prepares tailormade classes to help regional sales organizations meet local needs. If you are interested in our training, please contact: academy@geomax-positioning.com

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.

Total Care SHIELD

EXPERTISE AT YOUR SERVICE

We care for your work and want your GeoMax laser tools to stay operational for as long as you work. To ensure this, we support you with our highly skilled service centres around the world offering the following services for the lifetime of your product:

- Repair and maintenance of lasers and accessories
- Re-calibration
- Cleaning and general servicing of all product parts
- Functional testing and product safety

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

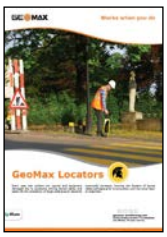
GeoMax Selection of our portfolio:

X-PAD Ultimate

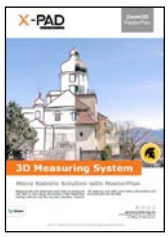
Total Stations

GNSS

Laser Rotators



Locators



Zoom3D

Zeta125 Series

Field Controller

Digital level

GEOMAX AUTHORISED DISTRIBUTION PARTNER