

# GeoMax Total Station Zoom30 Series



ZOOM30

# GeoMax

## About Us

GeoMax is an internationally active company developing, manufacturing and distributing quality construction and surveying instruments. We provide a comprehensive portfolio of integrated instruments for the construction, surveying and mapping industries. Both occasional and professional users are addressed with GeoMax's easy-to-use, yet highly productive, range of Total Stations, GPS, Lasers, Optical and digital levels.

GeoMax is part of the Hexagon Group, Sweden, a global tech-

nology group with strong market positions within measurement technologies. Hexagon is the world leader in multi-dimensional measurements within the macro and micro segments of the measurement and positioning market. The famous international companies within the Hexagon Group have delivered since more than 150 years precision products and solutions to the measurement industry. This technology is supported by a comprehensive sales and service network covering all continents with over 100 branches.

The close cooperation within the Hexagon Group grants GeoMax's access to state of the art development and production facilities in Europe, America and Asia. This enables us to focus on delivering products that "work when you do" by optimizing quality and productivity. Through a continually growing distribution, GeoMax products are available in Europe, Asia and the Middle East delivering outstanding price-to-performance.



**GEOMAX**  
Part of Hexagon Group

**HEXAGON**  
precision in everything





Zoom30

# Total Confidence

At GeoMax we understand that you work in demanding environments and require excellent price-to-performance without compromising quality, that's why we build products that "Work when you do!".



## accXess™ EDM Technology

GeoMax's accXess EDM Technology provides class-leading reflectorless measurements. Exceptional reflectorless performance up to 600m. The extra small EDM footprint and sophisticated signal processing technology ensures you maximum accuracy regardless of the distance or conditions.



## USB Port

Data transfer, import and export is easy using the USB interface port on the GeoMax Zoom30. A 4GB high performance USB memory stick is provided with every GeoMax Zoom30 series instrument.



## Laser plummet

The Zoom30 series' laser plummet delivers you accurate and easy centering every time. The bright laser beam is easily visible and eliminates time consuming procedures required with an optical plummet. You win at every set-up.



## Complete system

GeoMax not only provides you with a highly productive instrument, but also with a complete set of accessories to meet your demanding tasks. With everything in one box, GeoMax "Works when you do!".

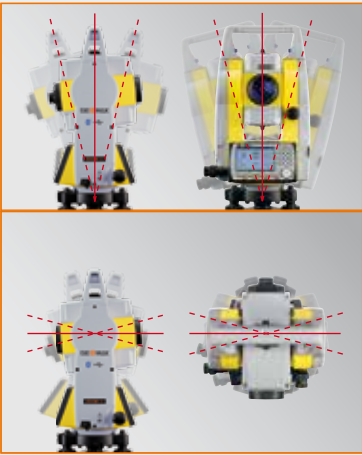


# Zoom30



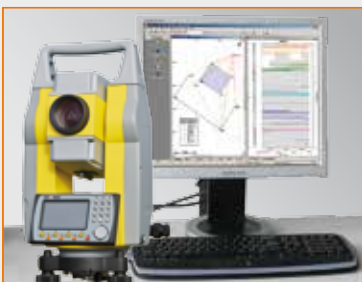
## Built for all environments

The Zoom30 withstands the toughest environments. With the optional Polar certification the Zoom30 is individually tested at  $-30^{\circ}\text{C}$ .



## Quadruple-axis compensation

With advanced electronic compensators, GeoMax instruments are always level and collimation errors corrected. Quadruple-axis compensation is standard on all GeoMax total stations which means you can be sure of maximum reliability with both horizontal and vertical angles.



## Data transfer

Once you've finished with your field work, the job is not necessarily complete. Data can be directly transferred from the field to CAD and other software using Bluetooth or USB. GeoMax's PC software GeoMax Geo Office is provided together with the Zoom30 series and allows you to view, edit and transfer data to other instruments and formats with ease.



## Powerful onboard Apps

The powerful onboard software provides you with full flexibility to perform any task. A complete suite of Apps built on a Windows Embedded CE operating system is standard providing total control over a whole range of tasks.

Works when you do

# Works when you do!

At GeoMax we understand how important your data is, that is why we provide complete data flexibility and maintain data integrity through an internal database on every Zoom30 series instrument. You can be certain that GeoMax "Works when you do!"

## Complete Communication Control

The GeoMax Zoom30 series provides you with complete control over your data and communication. Choose between Bluetooth, USB-Stick, 2 USB-Ports and an RS232 to import and export your data in customized and standard formats.

A powerful onboard database is at your fingertips. Export to a variety of standard formats such as ASCII and DXF or create your own custom format. Data can be imported from a wide variety of sources. Control all your data onboard using the integrated data and file manager or import data directly into GeoMax Geo Office. GeoMax's flexible PC software provides the ideal office companion to the GeoMax Zoom30 series.

Data can be stored on the large internal memory and transferred using the device you choose. With the Zoom30's flexible communication options you can choose your favorite communication method. Bluetooth, USB and RS232 can be used to transfer data quickly, securely and flexibly.



Industry standard USB comes on every GeoMax Zoom30 series instruments. Easy data transfer between instruments, your PC and other devices is possible using standard USB sticks or the high performance, large capacity GeoMax ZMS100 USB stick.



Use Bluetooth to connect your GeoMax Zoom30 instrument to a wide variety of external devices including PCs and PDAs. The integrated provides maximum comfort and security without sacrificing performance.



# Zoom30

Every Zoom30 series instrument comes with a complete range of powerful Applications. From survey and stake-out to CoGo and volume calculations the Zoom30 has an Application to get the job done.

## Survey

The powerful survey App allows you to collect data quickly and accurately. Flexible coding and display formats delivers data the way you want it. Directly export surveys with codes into CAD.

## Set-up with Resection

With the simple push of a key, your station coordinates and orientation are calculated and surveying can immediately begin.

## Set Out

With accurate and easy-to-use guidance you'll be quickly complete with one point and moving to the next.

## Area (3D) & Volume

The area (3D) and volume app determines the area, volume and perimeter of the plan and slope surfaces at a simple button press.

## Remote Elevation

The Remote Height application allows you to easily determine the height of a point when you cannot measure a distance to the point directly. The height of the remote point is automatically computed.

## Construction

With large graphical displays the staking of your construction site has never been so easy. You'll complete construction staking easier and faster than ever before.

## Reference Element

Regardless of whether you're staking or checking a reference line or arc you'll be amazed at the flexibility.

## CoGo Routines

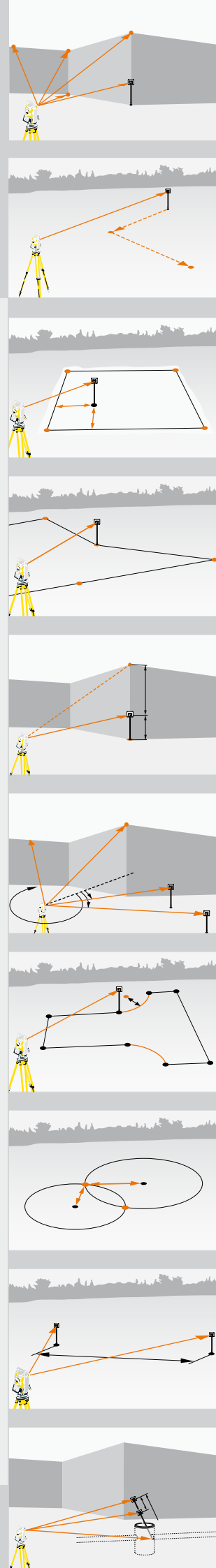
Easily calculate and determine points out in the field with the CoGo App. This powerful App allows you to calculate inverse, intersection, offset and line extension in a few easy steps.

## Missing Line Measurement

Determine the distance, grade, azimuth and height difference between any two points. Determining ties is a breeze.

## Two Prism Offset

Situations arise when you cannot measure a point directly. With Two Prism Offset simply place one end of the rod on the hidden point and measure to both reflectors. The coordinates of the hidden point are automatically computed.



Works when you do

# Zoom30 Series

## Technical Data



<b>GeoMax Zoom30 7", 5", 3", 2" accXess4</b>	Distance Measurement on Reflector 400 m Reflectorless Distance Measurement
<b>GeoMax Zoom30 5", 3", 2" accXess6</b>	Distance Measurement on Reflector 600 m Reflectorless Distance Measurement

### Angle measurements (Hz, V)

Method	Absolute continuous
Display resolution	1"
Standard deviation (ISO 17123-3)	2", 3", 5", 7"

### Telescope

Magnification	30x
Field of view	1° 30' (26 m / 1 km)
Minimum focus	1.7 m
Reticle	3 level reticle illumination

### Compensator

System	Quadruple-axis compensation
Working Range	± 4'
Setting accuracy	0.5", 1", 1.5", 2"

### Distance Measurement on Reflector

Measuring range with circular prism	3'500 m
Measuring range with 3 prisms	5'400 m
Measuring with reflective foil (60 mm x 60 mm)	250 m
Accuracy (Fine/Quick/Tracking)	2 mm + 2 ppm / 5 mm +2 ppm / 5 mm + 2 ppm
Measuring time (Tracking/Quick/Fine)	0.15 sec / 0.8 sec / 2.4 sec

### accXess™ EDM Reflectorless Distance Measurement

accXess6 Range with white target	600 m
accXess4 Range with white target	400 m
Range with circular prism	>7'500 m
Accuracy	3 mm + 2 ppm (>500 m 4 mm + 2 ppm)
Measuring time	3.0 - 6.0 sec

### Communication

Internal memory/storage	10'000 points (incl. measurement, coords & codes)
Interface	USB and RS232
Bluetooth	Bluetooth connections for comm. & data transfer
USB Host	USB memory stick port for data transfer

### Operation

Display	160 x 280 pixels, 8 lines x 30 characters
Keys	Alphanumeric keys and 4 functions keys
Operating system	Windows® Embedded CE operating system

### Laser plummet

Type	Laser point, brightness adjustable in steps
Accuracy	1.5 mm at 1.5 m instrument height

### Environmental conditions

Optional Polar version tested to	-30° C
Operating / Storage Temperature	-20° C ~ +50° C / -40° C ~ +70° C
Protection to dust and water	IP54

### Weight

Weight including battery and tribrach	5.1 kg
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### Battery

Voltage/Capacity	ZBA400 7.4V 3800mAh
Operating period with continuous angle measurement	36 hours
Operating period with measurement every 30 seconds	9 hours (>1'000 measurements)

**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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