## **GeoMax Total Station**

## Zoom80 Series





## **Advanced Technology**

The advanced positioning technology of AIM360, TRACK360 & SCOUT360 incorporated in Zoom80 provides you with the most efficient way to survey. With GeoMax technology of the highest standard, you can be sure it "works when you do".

## **STREAM36**

SCOUT TRACK

#### AIM

#### SCOUT360

Scans the entire working area within seconds to quickly find you. All measurement work can therefore be performed as one-man by remote control.



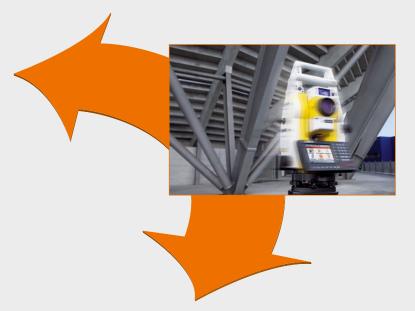




#### **Robotic Surveying**

Imagine an instrument that provides you with a real flow of work in terms of efficiency, precision and comfort. There is no need for assistance, it is quick to set up and has many easy-to-use functions, simplifying the entire process even more.

The GeoMax Zoom80R models provide everything you ever desired in your daily work. Wide angle search technology quickly locates the survey pole and once locked in, it continues to follow the prism as you move. Fully automatic measurements are executed by the press of a button on your remote controller.



#### TRACK360

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





#### **AIM360**

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



## **Many Additional Features**

The Zoom80 contains many leading edge technologies that improve you efficiency. With long range accXess10 reflectorless EDM or the Zoom80C remote control, you minimise the time to complete any type of survey task.



#### **NavLight**

The NavLight fitted as standard in the telescope, is a practical alignment aid for speeding up staking-out work. The flashing red and yellow lights guide the rodman quickly and exactly into the line of sight.



#### accXess™ EDM Technology

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





#### **Laser Plummet**

The laser plummet built into the Zoom80 total station 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.



# Z00m80



#### **Zoom80C Controller**

When operating by remote control, the functionality of the Zoom80 total station is even further enhanced. The controller provides one-man robotic surveying with complete control of all measurement tasks from the survey pole.

The display and software are the same as those on the total station. Therefore the Zoom80C controller lets you measure remotely as easy as directly on the instrument.

The controller, battery, radio modem and antenna form a single compact unit that can be conveniently attached to the survey pole. Together with a standard passive prism, provides a light-weight pole setup.



#### **Xsite Onboard Software**

The Zoom80 total station and Zoom80C controller are supplied with the powerful Xsite software. Data can be imported and exported in virtually any format to match your other software and equipment. The data can also be processed and adjusted using GeoMax Office software (GGO).

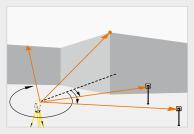
The same Xsite software runs on both the total station and controller. Therefore you can easily switch between using the instrument directly or by remote control, without needing to learn an additional software.



### **Powerful Xsite Software**

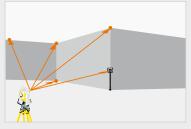
Xsite software, together with a complete range of applications, cover the requirements for all measurement tasks. From simple measuring to complex road stake-outs, you can be certain that GeoMax "works when you do".

#### Standard Applications



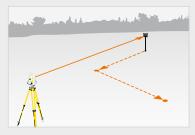
#### Setup

Quickly position and orientate your Zoom80 total station. Setup either on known coordinates or use resection to determine the position.



#### **Survey**

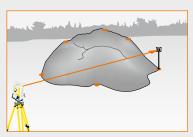
Allows you to collect data quickly and accurately. Flexible coding and display formats delivers data the way you want it.



#### Stake Out

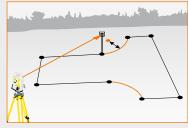
With accurate and easy-touse graphic guidance you'll be quickly finished with one point and moving on to the next.

#### **Optional Applications**



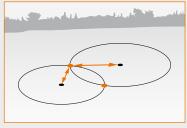
#### **Volume**

Measure any complex surface and immediately calculate the area, perimeter and volume in the field.



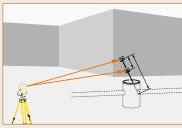
#### **Reference Line**

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



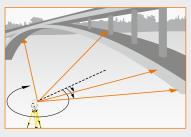
#### **CoGo Routines**

Easily determine points out in the field. CoGo lets you calculate inverse, traverse, intersections and area division in few easy steps.



#### **Hidden Point**

Situations arise where you cannot measure a point directly. This app allows to measure at an offset and calculated the position of the hidden point.



#### **Sets of Angles**

A time saving application for repetitively measuring the same set of targets for any number of times.



#### Road

A comprehensive app for staking out and checking all types of alignments, from simple centerlines to the most complex designs.

## **Technical Data**

# Z00m80

Angle Measurements (Hz, V)	GeoMax Zoom80S (Servo) 5", 2"	AIM360, TRACK360
Accuracy (ISO 17123-3)	GeoMax Zoom80R (Robotic) 5", 2"	AIM360, TRACK360, SCOUT360
Compensation Display resolution 0.1" (0.1 mgon)  Distance Measurements  Prism (range, accuracy) 3,500 m (12,000 ft), 1 mm + 1.5 ppm  Prism, long-range (range, accuracy) 10,000 m (33,000 ft), 5 mm + 2 ppm  Non-prism (range, accuracy) 1,000 m (33,000 ft), 5 mm + 2 ppm  Non-prism (range, accuracy) 1,000 m (33,000 ft), 5 mm + 2 ppm  Non-prism (range, accuracy) 1,000 m (33,000 ft), 5 mm + 2 ppm  T mm x 10 mm at 30 m, 8 mm x 20 mm at 50 m  Motorisation  Rotating speed 45° (50 gon)/s  AIM360  Range (round/360° prism) 1,000/800 m (3,300/2,600 ft)  Accuracy (ISO 17123-3) 1" (0.3 mgon)  TRACK360  Range (round/360° prism) 800/600 m (2,600/2,000 ft)  Speed 5 m/s at 20 m, 25 m/s at 100 m  SCOUT360 (Zoom80R)  Range 300 m (1,000 ft)  Typical search time 5 - 10 sec  Search area Default Hz: 360°, V: 36°, definable search window  NavLight  Working range 5 - 150 m (15 to 500 ft)  Positioning accuracy 5 cm at 100 m (2" at 330 ft)  Keyboard and Display  Display 1/4 VGA colour LCD, touch screen  Keyboard and Display  Display 4 keys including 12 function keys, illumination  Data Storage and Interface  Removable CompactFlash card  Bluetooth® wireless technology, RS232, ZRT80 radio modem  Weight and Environmental Conditions  Power Management  Battery Removable Li-Ion 7.4V, 4.4 Ah		5" (1.5 mgon), 2" (0.6 mgon)
Display resolution	Method	Absolute, continuous, diametrical
Distance Measurements           Prism (range, accuracy)         3,500 m (12,000 ft), 1 mm + 1.5 ppm           Prism (range, accuracy)         10,000 m (33,000 ft), 5 mm + 2 ppm           Non-prism (range, accuracy)         1,000 m (3,300 ft), 2 mm + 2 ppm           Laser dot size (non-prism)         7 mm x 10 mm at 30 m, 8 mm x 20 mm at 50 m           Motorisation         Rotating speed           AIM360         45° (50 gon)/s           Range (round/360° prism)         1,000/800 m (3,300/2,600 ft)           Accuracy (ISO 17123-3)         1" (0.3 mgon)           TRACK360         800/600 m (2,600/2,000 ft)           Range (round/360° prism)         800/600 m (2,600/2,000 ft)           Speed         5 m/s at 20 m, 25 m/s at 100 m           SCOUT360 (Zoom80R)         300 m (1,000 ft)           Range         300 m (1,000 ft)           Typical search time         5 - 10 sec           Search area         Default Hz: 360°, V: 36°, definable search window           NavLight         Working range           Working range         5 - 150 m (15 to 500 ft)           Positioning accuracy         5 cm at 100 m (2" at 330 ft)           Keyboard         34 keys including 12 function keys, illumination           Data Storage and Interface         Bluetooth® wireless technology, RS232, ZRT80 radio modem		
Prism (range, accuracy)   3,500 m (12,000 ft), 1 mm + 1.5 ppm	' '	0.1 (0.1 mgon)
Prism, long-range (range, accuracy)		3 500 m (12 000 ft) 1 mm + 1 5 nnm
Non-prism (range, accuracy)		
Acting speed   As		1,000 m (3,300 ft), 2 mm + 2 ppm
Rotating speed  AIM360  Range (round/360° prism) 1,000/800 m (3,300/2,600 ft)  Accuracy (ISO 17123-3) 1" (0.3 mgon)  TRACK360  Range (round/360° prism) 800/600 m (2,600/2,000 ft)  Speed 5 m/s at 20 m, 25 m/s at 100 m  SCOUT360 (Zoom80R)  Range 300 m (1,000 ft)  Typical search time 5 - 10 sec  Search area Default Hz: 360°, V: 36°, definable search window  NavLight Source 5 cm at 100 m (2" at 330 ft)  Keyboard and Display 1/4 VGA colour LCD, touch screen  Keyboard Memory/storage Removable CompactFlash card  Interface Bluetooth® wireless technology, RS232, ZRT80 radio modem  Weight and Environmental Conditions  Weight 5.5 kg (total station fully equipped)  Operating temperature -20° to +50°C (-4° to +122°F)  Protection against water and dust Power Management  Battery Removable Li-Ion 7.4V, 4.4 Ah	Laser dot size (non-prism)	
Range (round/360° prism) 1,000/800 m (3,300/2,600 ft) Accuracy (ISO 17123-3) 1" (0.3 mgon)  TRACK360 Range (round/360° prism) 800/600 m (2,600/2,000 ft) Speed 5 m/s at 20 m, 25 m/s at 100 m  SCOUT360 (Zoom80R) Range 300 m (1,000 ft) Typical search time 5 - 10 sec Search area Default Hz: 360°, V: 36°, definable search window  NavLight Working range 5 - 150 m (15 to 500 ft) Positioning accuracy 5 cm at 100 m (2" at 330 ft)  Keyboard and Display Display ¼ VGA colour LCD, touch screen Keyboard 34 keys including 12 function keys, illumination  Data Storage and Interface Memory/storage Removable CompactFlash card Bluetooth® wireless technology, RS232, ZRT80 radio modem  Weight and Environmental Conditions Weight 5.5 kg (total station fully equipped) Operating temperature -20° to +50°C (-4° to +122°F) Protection against water and dust  Power Management Battery Removable Li-Ion 7.4V, 4.4 Ah	Motorisation	
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Range (round/360° prism)  Speed  5 m/s at 20 m, 25 m/s at 100 m  SCOUT360 (Zoom80R)  Range  300 m (1,000 ft)  Typical search time  5 - 10 sec  Search area  Default Hz: 360°, V: 36°, definable search window  NavLight  Working range  Positioning accuracy  Keyboard and Display  Display  Display  May Calour LCD, touch screen  Keyboard  A keys including 12 function keys, illumination  Data Storage and Interface  Memory/storage  Interface  Memory/storage  Removable CompactFlash card  Interface  Bluetooth® wireless technology, RS232, ZRT80 radio modem  Weight and Environmental Conditions  Weight  Operating temperature  Power Management  Battery  Removable Li-Ion 7.4V, 4.4 Ah	Accuracy (ISO 17123-3)	1" (0.3 mgon)
Speed 5 m/s at 20 m, 25 m/s at 100 m  SCOUT360 (Zoom80R)  Range 300 m (1,000 ft)  Typical search time 5 - 10 sec Search area Default Hz: 360°, V: 36°, definable search window  NavLight Working range 5 - 150 m (15 to 500 ft) Positioning accuracy 5 cm at 100 m (2" at 330 ft)  Keyboard and Display		
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Range 300 m (1,000 ft) Typical search time 5 - 10 sec Search area Default Hz: 360°, V: 36°, definable search window  NavLight Working range 5 - 150 m (15 to 500 ft) Positioning accuracy 5 cm at 100 m (2" at 330 ft)  Keyboard and Display Uv VGA colour LCD, touch screen Keyboard 34 keys including 12 function keys, illumination  Data Storage and Interface Memory/storage Removable CompactFlash card Interface Bluetooth® wireless technology, RS232, ZRT80 radio modem  Weight and Environmental Conditions Weight 5.5 kg (total station fully equipped) Operating temperature -20° to +50°C (-4° to +122°F) Protection against water and dust IP54, 95% non-condensing  Power Management Battery Removable Li-Ion 7.4V, 4.4 Ah	·	5 m/s at 20 m, 25 m/s at 100 m
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Working range 5 - 150 m (15 to 500 ft) Positioning accuracy 5 cm at 100 m (2" at 330 ft)  Keyboard and Display Display 4VGA colour LCD, touch screen Keyboard 34 keys including 12 function keys, illumination  Data Storage and Interface Memory/storage Removable CompactFlash card Interface Bluetooth® wireless technology, RS232, ZRT80 radio modem  Weight and Environmental Conditions Weight 5.5 kg (total station fully equipped) Operating temperature -20° to +50°C (-4° to +122°F) Protection against water and dust IP54, 95% non-condensing  Power Management Battery Removable Li-Ion 7.4V, 4.4 Ah		Default 112. 300 , v. 30 , definable search window
Positioning accuracy  Keyboard and Display  Display  May VGA colour LCD, touch screen  Seyboard  Data Storage and Interface  Memory/storage Interface  Meight and Environmental Conditions  Weight  Operating temperature  Power Management  Battery  S cm at 100 m (2" at 330 ft)  A VGA colour LCD, touch screen  Seymont Storage  Removable CompactFlash card  Bluetooth® wireless technology, RS232, ZRT80 radio modem  S 5.5 kg (total station fully equipped)  -20° to +50°C (-4° to +122°F)  Protection against water and dust  Power Management  Removable Li-Ion 7.4V, 4.4 Ah		5 - 150 m (15 to 500 ft)
Keyboard and Display         Display       ¼ VGA colour LCD, touch screen         Keyboard       34 keys including 12 function keys, illumination         Data Storage and Interface         Memory/storage       Removable CompactFlash card         Interface       Bluetooth® wireless technology, RS232, ZRT80 radio modem         Weight and Environmental Conditions         Weight       5.5 kg (total station fully equipped)         Operating temperature       -20° to +50°C (-4° to +122°F)         Protection against water and dust       IP54, 95% non-condensing         Power Management         Battery       Removable Li-Ion 7.4V, 4.4 Ah		
Display  Keyboard  Data Storage and Interface  Memory/storage Interface  Meight and Environmental Conditions  Weight  Operating temperature  Protection against water and dust  Power Management  Battery  Reyboard  Removable CompactFlash card Bluetooth® wireless technology, RS232, ZRT80 radio modem  Storage  Removable CompactFlash card Bluetooth® wireless technology, RS232, ZRT80 radio modem  Storage  Removable CompactFlash card Bluetooth® wireless technology, RS232, ZRT80 radio modem  Storage  Removable CompactFlash card Bluetooth® wireless technology, RS232, ZRT80 radio modem  Storage  Fower Management  Removable Li-Ion 7.4V, 4.4 Ah		
Keyboard  Data Storage and Interface  Memory/storage Interface  Meight and Environmental Conditions  Weight Operating temperature Protection against water and dust  Power Management  Battery  Removable CompactFlash card Bluetooth® wireless technology, RS232, ZRT80 radio modem  Storage  Removable CompactFlash card Bluetooth® wireless technology, RS232, ZRT80 radio modem  Storage Storage  Removable Loop CompactFlash card Bluetooth® wireless technology, RS232, ZRT80 radio modem  Storage Storage Storage Storage Bluetooth® wireless technology, RS232, ZRT80 radio modem  Storage Sto		1/4 VGA colour LCD, touch screen
Memory/storage Removable CompactFlash card Interface Bluetooth® wireless technology, RS232, ZRT80 radio modem  Weight and Environmental Conditions Weight 5.5 kg (total station fully equipped) Operating temperature -20° to +50°C (-4° to +122°F) Protection against water and dust IP54, 95% non-condensing  Power Management Battery Removable Li-Ion 7.4V, 4.4 Ah		
Memory/storage Removable CompactFlash card Interface Bluetooth® wireless technology, RS232, ZRT80 radio modem  Weight and Environmental Conditions Weight 5.5 kg (total station fully equipped) Operating temperature -20° to +50°C (-4° to +122°F) Protection against water and dust IP54, 95% non-condensing  Power Management Battery Removable Li-Ion 7.4V, 4.4 Ah	Data Storage and Interface	
Weight and Environmental Conditions Weight 5.5 kg (total station fully equipped) Operating temperature -20° to +50°C (-4° to +122°F) Protection against water and dust IP54, 95% non-condensing  Power Management Battery Removable Li-Ion 7.4V, 4.4 Ah		Removable CompactFlash card
Weight  5.5 kg (total station fully equipped)  Operating temperature  -20° to +50°C (-4° to +122°F)  Protection against water and dust  IP54, 95% non-condensing  Power Management  Battery  Removable Li-Ion 7.4V, 4.4 Ah		Bluetooth® wireless technology, RS232, ZRT80 radio modem
Weight  5.5 kg (total station fully equipped)  Operating temperature  -20° to +50°C (-4° to +122°F)  Protection against water and dust  IP54, 95% non-condensing  Power Management  Battery  Removable Li-Ion 7.4V, 4.4 Ah	Weight and Environmental Conditions	
Protection against water and dust IP54, 95% non-condensing  Power Management  Battery Removable Li-Ion 7.4V, 4.4 Ah		5.5 kg (total station fully equipped)
Power Management		-20° to +50°C (-4° to +122°F)
Battery Removable Li-Ion 7.4V, 4.4 Ah	Protection against water and dust	IP54, 95% non-condensing
	Power Management	
Operating time 8 h		
	Operating time	8 h

Distance meter (Prism): 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 resp. EN 60825-1 platance meter (Non-prism): Laser class 3R in accordance with IEC 60825-1 resp. EN 60825-1

GeoMax Zoom80C	Windows CE Controller
Keyboard and Display	
Display	¼ VGA color LCD, touch screen
Keyboard	62 keys including 12 function keys, illumination
Data Storage and Interface	
Memory/storage	Removable CompactFlash card
Interface	Integrated 2.4 GHz radio modem, Bluetooth®, RS232
Weight and Environmental Conditions	
Weight	0.8 kg (2.7 kg with pole and prism)
Operating temperature	-30° to +65°C (-22° to +149°F)
Protection against water and dust	IP67, dusttight, waterproof 1 m temporary immersion
Power Management	
Battery	Removable Li-Ion 7.4V, 2.2 Ah
Operating time	9 h

## **GeoMax**About Us

GeoMax is an international company developing, manufacturing and distributing quality construction and surveying instruments. 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.

We are part of the Swedish Hexagon Group, the world leader in multidimensional measurements within the macro and micro segments of the measurement and positioning market. The global technology is supported by a comprehensive sales and service network covering all continents with over 100 branches. Through a continually growing distribution and service network GeoMax products are available worldwide delivering outstanding price-to-performance.

The close cooperation within the Hexagon Group grants GeoMax's access to state of the art development and production facilities. This enables us to focus on delivering products that "work when you do" by providing the functionality you need without burdening yourself with overloaded features.









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