

GeoMax Digital Level ZDL700 Series



GeoMax

About Us

GeoMax is an internationally active company developing, manufacturing and distributing quality surveying instruments. We provide a comprehensive portfolio of integrated instruments for the surveying, mapping and construction 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 technology group with strong market positions within measurement technologies. Hexagon is the world leader in multidimensional 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.



Digital = Easy + Accurate + Fast

At GeoMax we understand that you require accurate results and demand ease of use in combination with fast operation. That's why we've introduced the ZDL700 digital level for the surveying and construction world. Now you can 'go digital' for your entire levelling task with a product that delivers outstanding price-performance and "Works when you do!".

Quick, Easy & Error-free

The super fast measurement speed of less than 3 sec. in combination with the simplicity of the one-push measure and store functionality provides faster, more economical workflow. Digital reading combined with internal memory make miss-readings and operator interpretation errors a thing of the past.

Accurate

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

Leave the Calculator in your pocket

The onboard adjustment program, height difference calculation, inverse staff measuring mode, in combination with various measuring configurations enable you to execute all calculation with the ZDL700. Based on digital readings and automated calculation, never again will time consuming use of a calculator slow you down.

Large Internal Memory

To further enhance your levelling, memory for up to 2'000 points is integrated in the ZDL700. Features like the ability to switch between manual and automatic point numbering increase not only your flexibility but also allow you to document your work on the fly.



Shock and water resistant structure

With the design criteria, "Works when you do!" GeoMax products are built to withstand all environmental conditions. The ZDL700 conforms with IP55 (IEC 60529) and is protected against jets of water from all directions. GeoMax's patented shock-resistant pendulum magnetic damped compensator ensures durability and precision. The ZDL700 is built to withstand all environmental conditions, GeoMax "Works when you do!".



Built for all conditions

The high quality optical system of the ZDL700 in combination with its proven algorithms ensures operation in all conditions, including low light and bright sunshine. Even in complete darkness, a small flashlight is all you need to continue accurate measurement. Whether working indoor, outdoor or in a tunnel the ZDL700 "Works when you do!".



Seamless dataflow

The data recorded on the job site can be simply downloaded by connecting the ZDL700 with a PC or laptop. Seamless dataflow from field to finish is guaranteed. In addition, external data collectors or PDAs provide you with an additional degree of flexibility for downloading or processing your measurements on-line.

ZDL700 Series

Accessories and Technical Data

Fibreglass high accuracy staff

For high precision measurement campaigns we offer a one section 3 m fibreglass staff; 0.7 mm standard deviation for 1 km double-run levelling, front: code, reverse: graduated (766162).

Telescopic standard staff

For all your standard levelling activities we offer the flexible

4 sectional 5 m aluminium staff; 2.0 mm standard deviation for 1 km double-run levelling, front: code, reverse: graduated (766163).



Light weight precision tripod

Accurate work demands quality accessories, we recommend the fully tested light weight original tripods from our GeoMax accessories selection to reach highest accuracy for all your tasks (765603, 765604).

Accuracy

Height accuracy $\pm 0.7 \text{ mm/km}$
 Distance accuracy $D < 10 \text{ m}, 10 \text{ mm} \mid D \geq 10 \text{ m}, 0.001 \times D$

Systems

Maximum Range 105 m
 Minimum Range 2 m
 Single measurement speed $< 3 \text{ sec.}$
 Minimum lighting condition 20 Lux
 Minimum field of view $\geq 50 \%$

Display

Minimum resolution (Ht) 0.1 mm
 Minimum resolution (Dist) 1 mm

Telescope

Magnification 24 x

Compensator

Range $\pm 10'$
 Setting accuracy $\pm 0.35''$

Communication

Internal memory 2'000 measurements
 Interface RS232

Environmental conditions

Operating / Storage Temperature $-10^\circ \text{ C} \sim +50^\circ \text{ C} \mid -40^\circ \text{ C} \sim +70^\circ \text{ C}$
 Protection to dust and water IP55

Weight

Weight including battery $< 2.5 \text{ kg}$

Battery

AA dry cells (4XLR6 / AA 1.5V)
 1800mAh / 2300mAh 14 / 16 hours continuous measurement



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