

## WATER LEVEL LOGGER

### Description

The resistive piezometer is a relative pressure transducer, which allows to define the piezometric height by measuring the hydrostatic pressure that acts on the sensor. On the inside of the self-supporting cable, a small tube connects the reference room of the sensor with the atmosphere, so that any changes in environmental pressure act contemporarily on the piezometric surface rather than on the reference room: this allows to measure just the water pressure, and therefore the water level.

In the integrated logger version, a data acquisition board provides automation and storage of measurements. The sensor is made of two parts connected by a cable of variable length based on the installation depth. The lower part, where the sensor and the circuit board are located, is cylindrical in shape, with a diameter of 21 mm and a length of 75 mm. The upper part, of a different shape according to the installation requirements, contains the connector for interfacing with your computer. Gestecno supplies a miniature level 12 mm diameter sensor, suitable for installation inside Casagrande piezometer.

The exceptional autonomy, due to the very low power consumption (with a range of one hour, the battery life is over 2-3 years), the enormous storage capacity, compact and robust execution and excellent quality components make this level gauge a unique tool for controlling and monitoring water levels in piezometers, in wells, pits, canals, tanks, rivers, lakes, etc.

### Applications

- Control of ground water level in standpipe and Casagrande piezometers
- Control of ground water level in canals, rivers, lakes, wells, reservoirs, springs, etc.



### Features

- Reliability also for long term monitoring
- Atmospheric pressure compensation
- Powered by low consumption battery
- High resolution and accuracy
- Degree of protection IP68
- Sensor also available in 12 mm diameter
- Easy and intuitive software interface

## Sensor Technical Specifications

|                              | 24 mm diameter sensor          | 14 mm diameter sensor          |
|------------------------------|--------------------------------|--------------------------------|
| <b>Sensor type</b>           | piezoresistive                 | piezoresistive                 |
| <b>Range</b>                 | 10, 20, 35, 70, 100 m water    | 35 m, 70 m water               |
| <b>Pressure measurement</b>  | absolute and relative pressure | absolute and relative pressure |
| <b>Resolution</b>            | 1 mm                           | 2 mm                           |
| <b>Total accuracy</b>        | < 0.25% F.S.                   | < 0.5% F.S.                    |
| <b>Operating temperature</b> | -10.....+40 °C                 | -10.....+40 °C                 |
| <b>Dimensions</b>            | 24 mm diameter — 100 mm length | 12 mm diameter — 110 mm length |
| <b>Material</b>              | stainless steel                | stainless steel                |

## Datalogger Technical Specifications

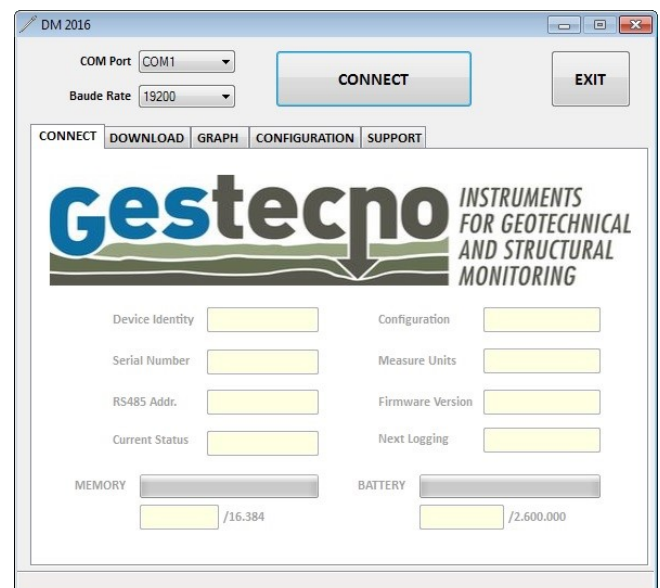
|                                    |                                                       |
|------------------------------------|-------------------------------------------------------|
| <b>Type of memory and capacity</b> | non volatile - 16.000 measurements with date and hour |
| <b>A/D Converter</b>               | 16 bit                                                |
| <b>Power</b>                       | lithium battery 3.6V                                  |
| <b>Connection Cable Interface</b>  | USB                                                   |
| <b>Measuring range</b>             | from 2 sec. to 24 hours programmable                  |
| <b>Resolution</b>                  | 1 mm                                                  |
| <b>Dimensions</b>                  | 30 mm diameter —250 mm length                         |
| <b>Material</b>                    | stainless steel                                       |

## Accessories and spare parts

- Battery kit
- Piezometer support
- Software kit and USB cable
- Cut to size signal cable

## Please Specify

| CODE    | PRODUCT DESCRIPTION                         |
|---------|---------------------------------------------|
| PED-100 | Water level logger (vented), diameter 24 mm |
| PED-300 | Water level logger (vented), diameter 14 mm |
| PED-400 | Signal cable (please specify length)        |
| PED-500 | Software and USB cable                      |



### For further information:

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