

d-PIEZO



YieldPoint's **d-Piezo** digital piezometer integrates a MEMS transducer with a micro-controller to provide a robust digital solution for water pressure and depth monitoring. The output signal is directly in kPa (0.01kPa resolution) and degC (0.1C resolution). The digital output string is transmitted as an RS485 signal, with 9600 baud rate (9600, 9, n, 1), and is ASCII encoded. Each instrument has a unique ID. RS485 signals tolerate wet conditions and the signals can be transmitted up to 1000m without amplification.

Data from an array of d-Piezoes can be remotely monitored using YieldPoint's Plug & Play data-loggers and telemetry solutions. Low cost wireless networking is available using d-Mesh 900MHz radios which have a standard LOS range of 500m. All solutions are eminently scalable.

Features:

- ▲ *MEMS digital technology*
- ▲ *0-1000kPa (unvented).*
- ▲ *0.01kPa resolution.*
- ▲ *Resolution approximately 1mm of water over 100m range*
- ▲ *-35C to +85 C Temperature Range.*
- ▲ *0.1C Temp resolution.*
- ▲ *RS485 output signal with 9600baud rate.*
- ▲ *ASCII encoded output string with Unique ID.*
- ▲ *Operates with data-loggers + wireless telemetry solutions*
- ▲ *On board signal processing*
- ▲ *RS485 output signal tional on-board digital temperature sensor for additional information*
- ▲ *Diameter 25mm*
- ▲ *High survivability electronics*
- ▲ *Easy to install and maintain*
- ▲ *Arrives on site fully assembled*

Operation

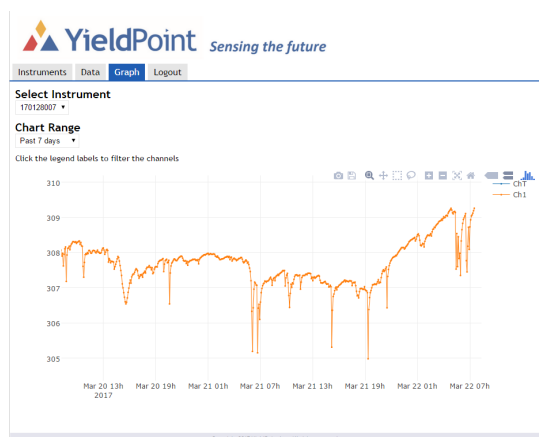


Figure 1: d-Piezometer at approx.. 20m depth in residential well. This residential well fills a pressure tank periodically indicated by the sharp drawdown.

Specifications

- ▲ **Pressure:**
0-1000kPa (unvented).
0.01kPa resolution.
- ▲ Resolution approximately 1mm of water over 100m range
- ▲ **Temperature:**
-35C to +85C
0.1C resolution.
- ▲ **Output Signal** RS485 with transmission to data logger up to 500m over 2 x tp.
- ▲ **Temp. Range:** Temp: -30 to 85°C

To order, please specify:

- ▲ Number of detection points: Up to 10
- ▲ Custom location of detection points
- ▲ Length between readout head and first point

Figure 3: How data will appear from the data logger. See on Line 4 when the last 3 points are lost.