



# HYDROS 21: CONDUCTIVITY / TEMPERATURE / DEPTH SENSOR

## DESCRIPTION

A compact 3.4 cm diameter sensor that fits into tight spaces, the HYDROS 21 is a low-cost, durable, and easy-to-use tool for monitoring EC, temperature, and depth in both groundwater and surface water. More importantly, it's an all-in-one instrument. When used with the ZL6 data logger, you won't require an additional sensor for measuring—and referencing—barometric pressure. With a range of 0 to 120 dS/m and a measuring depth of 10 m, the sensor makes accurate depth and EC measurements for a broad range of applications.

One of the qualities that makes the HYDROS 21 so easy to use is its fast plug-and-play compatibility with the ZL6 data logger (also compatible with Campbell Scientific data loggers). Plus, with the ZL6, you can monitor and remotely access cloud data wirelessly from any internet-connected computer or device in near-real time.



## HYDROS 21

### FEATURES

- Continuously monitor groundwater and surface water level changes
- Integrated electrical conductivity and temperature measurement
- 3.4 cm diameter sensor that fits into tight spaces
- Low cost
- Durable
- Easy to use

Trying to measure water level, temperature, and EC typically requires an expensive sensor with integrated telemetry. Unlike competitor sensors, all of the HYDROS 21's data management happens in an external data logger, so the cost of each individual sensor is lower. Now, instead of having to rely on a single point measurement, you can take readings in several different locations without exceeding your budget.

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SPECIFICATIONS	
<b>Range</b>	Water depth: 0 to 1,000 cm Electrical conductivity: 0 to 120 dS/m Temperature: -11 to 49 °C, do not expose to freezing temperatures if sensor is in water
<b>Resolution</b>	Water depth: 2 mm Electrical conductivity: 0.001 dS/m Temperature: 0.1 °C
<b>Accuracy</b>	Water depth: +/- 0.5% of full scale @ 20 °C  <b>NOTE: Depth measurement accuracy assumes no abrupt temperature variations</b>  Electrical conductivity: ±0.01 dS/m or ±10% (whichever is greater)  <b>NOTE: The EC is corrected to a standard temperature @ 25 °C</b>  Temperature: ±1 °C
<b>Operation temperature</b>	0 to 50 °C (Pressure transducer cannot be allowed to freeze while submersed)
<b>Power requirements</b>	3.6 - 15 VDC, 0.03 mA quiescent, 0.5 mA during 300 ms measurement
<b>Dimensions</b>	9 cm (l) x 3.4 cm (w)
<b>Measurement time</b>	300 ms (milliseconds)
<b>Output</b>	Serial TTL, 3.6 Volts Levels or SDI-12
<b>Connector types</b>	3.5 mm (stereo) plug or stripped & tinned lead wires (3)
<b>Cable length</b>	10 m standard; custom lengths available upon request
<b>Data logger compatibility (not exclusive)</b>	METER ZL6, EM50/60 Series, ProCheck, Campbell Scientific
<b>Software compatibility</b>	ECH <sub>2</sub> O Utility (rev 1.64+), DataTrac3 (rev 3.4+)

## Contact info



## Monitoring MENA

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While engineering the HYDROS 21, we wanted to design a water level sensor that was not only highly accurate but also provided a high degree of value. Because of its low-complexity, low-maintenance, and low-cost design, you can be assured you're getting an instrument that will save you time, hassle, and money.

This Instrument is manufactured by our principle company

**METER Environment - USA**