

# 3-in-1 Water Level Sensor

[metergroup.com/environment/products/hydros-21-water-level-monitoring/](https://www.metergroup.com/environment/products/hydros-21-water-level-monitoring/)



## Just the right mix of measurements

### HYDROS 21

#### The case of too many sensors

The problem with most water level, temperature, and depth sensors is that their cost is prohibitively high. Not only that, but the measurement often requires you to purchase an extra sensor to make a barometric pressure reading to correct for atmospheric pressure. You need a low-cost instrument that's equipped with every sensor necessary for things like tracking changes in solute movement, measuring groundwater recharge, and studying surface water hydrology. You need the HYDROS 21.

#### Just the right mix of measurements

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 our [EM60G](#) data logger, you won't require an additional sensor for determining—and correcting for—barometric pressure. With a range of 0 to 120 dS/m and a measuring depth of 10 m, the sensor makes accurate EC measurements for a broad range of applications.

#### Level 1 simplicity (on a scale of 1-10)

One of the qualities that makes the HYDROS 21 so easy to use is its fast plug-and-play

compatibility with EM60G data loggers (also compatible with Campbell Scientific data loggers). Plus, with the EM60G data logger, you can monitor and remotely access data wirelessly from any internet-connected computer in near-real time.

## Same measurement specs for less

Trying to measure water level, temperature, and EC typically requires an expensive sensor (especially one that measures EC). Since much of the HYDROS 21's complex circuitry is in the data logger, the cost of each individual sensor is lower. So instead of having to rely on a single point measurement, you can now take readings in several different locations without exceeding your budget.

## A high-level water sensor in every sense

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.

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## 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

## Specifications

Range	Water depth: 0 to 10,000 mm Electrical conductivity: 0 to 120 dS/m Temperature: -11 to 49 °C, do not expose to temperatures <32 °F if sensor is in water
Resolution	Water depth: 2 mm Electrical conductivity: 0.001 dS/m Temperature: 0.1 °C
Accuracy	Water depth: +/- 0.05% of full scale @ 20 °C Electrical conductivity: ±0.01 dS/m or ±10% (whichever is greater) Temperature: ±1 °C
Operation temperature	0 to 50 °C (Pressure transducer cannot be allowed to freeze while submersed)

Power requirements	3.6 - 15 VDC, 0.03 mA quiescent, 0.5 mA during 300 ms measurement
Dimensions	9 cm (l) x 3.4 cm (w)
Measurement time	300 ms (milliseconds)
Output	Serial TTL, 3.6 Volts Levels or SDI-12
Connector types	3.5 mm (stereo) plug or stripped & tinned lead wires (3)
Cable length	10 m standard; custom lengths available upon request
Data logger compatibility (not exclusive)	METER EM50/60 Series, ProCheck, Campbell Scientific
Software compatibility	ECH <sub>2</sub> O Utility (rev 1.64+), DataTrac3 (rev 3.4+)

## Accessories

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## Splice Kit

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Probe Adaptor Pigtail for CSI Data Loggers

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Pigtail-to-Stereo Adaptor

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### 50 Foot Extension Cable

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### 10 Foot Extension Cable

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### Support

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Have a question or problem? Our support team can help.

We manufacture, test, calibrate, and repair every instrument in-house. Our scientists and technicians use the instruments every day in our product testing lab. No matter what your question is, we have someone who can help you answer it.

Email: [support.environment@metergroup.com](mailto:support.environment@metergroup.com)

Phone US: +1 509-332-5600

Phone Europe: +49 89 12 66 52 0

## Downloads

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[HYDROS 21 firmware updater EXE / 1.30 MB](#)

## Related Products

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### EM60G

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The EM60G is a plug-and-play data logger for environmental monitoring.

[Learn more](#)

[Get pricing](#)

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