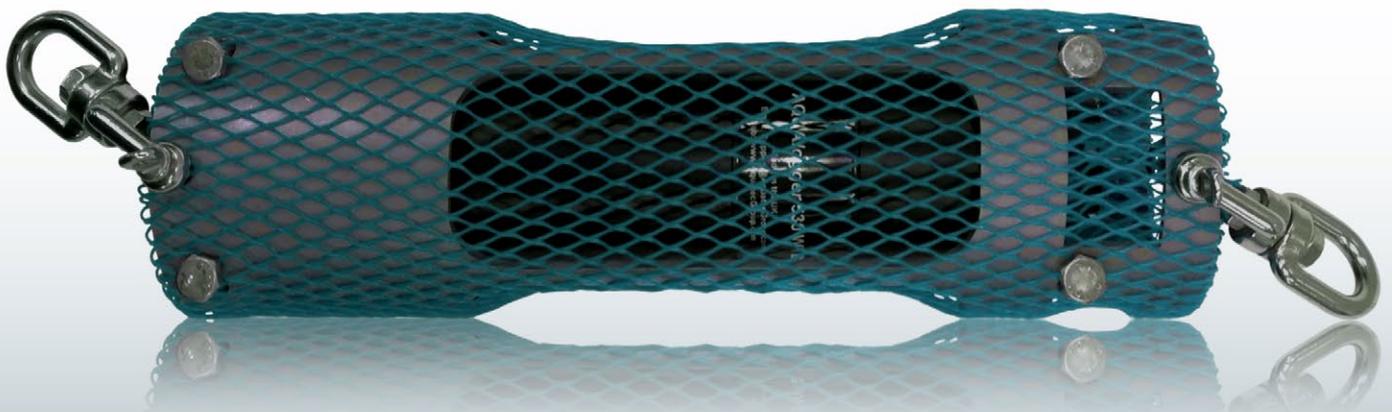# Wireless Temperature and Depth Logger
AQUA_logger_ ® 530WTD

The AQUA_logger_ ® 530WTD is a wireless, standalone temperature and depth logger with a robust, compact design for use in marine and freshwater environments. Developed for demanding applications such as commercial fishing and research, it automatically transfers stored data wirelessly to a designated PC or laptop once retrieved from the water. Quick, straightforward setup and deployment save valuable time in the field, making it ideal for repeat profiling and multiple-vessel operations.

KEY FEATURES

- Self-contained temperature and pressure logging
- Pressure to depth conversion
- Compact wireless design
- Automatic data display on retrieval
- Automatic download and processing
- Flexible sampling - options for continuous and burst sampling, depth trigger, up to 1 Hz sample rates and averaging
- Robust cage to protect logger on vessels

APPLICATIONS

- Oceanographic and environmental monitoring
- Commercial fisheries - to aid species targeting and fishing methods
- Crowdsourcing and citizen science projects
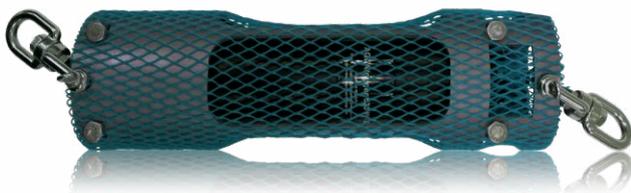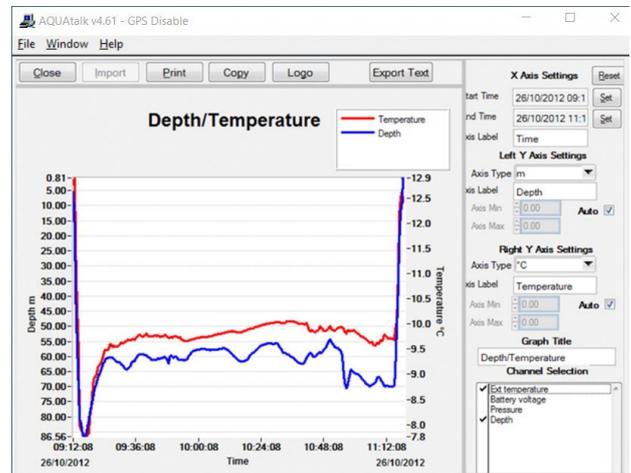
TECHNICAL SPECIFICATIONS

Pressure sensor	Piezo-resistive bridge | 5 bar (~40 m), 10 bar (~100 m), 50 bar (~500 m), 60 bar (~600 m) | ±0.2% FS accuracy (including non-linearity, hysteresis, zero offset and end value deviation [corresponds to measured error per IEC 61298-2]), 0.01% FS resolution
Temperature sensor	Thermistor | -2 to +35°C standard range | ±0.05°C accuracy, 0.001°C resolution | Time constant - better than 5 seconds to 63% of the change in value (high-speed temperature probe with 1 second time constant also available)
Parameters	Pressure | Temperature | Battery Voltage | Depth (Derived parameter)
Memory	> 4,000,000 parameters readings in non-volatile FLASH
Logging lifetime	Depends on logging parameters - up to 1 year
Data retention	>10 years
Sampling	Burst or continuous
Acquisition rate	Up to 1 Hz
Burst averaging	Bursts may be averaged to a single data value
Communication	Logger communication: Wireless - IEEE802.15.1
Battery	1.5 alkaline battery
Software	AQUA*talk*® for configuration and download
Maximum depth	600 m
Housing	Acetal
Weight	520 g in air, 200 g in water - logger only | 1,320 g in air, 600 g in water - with cage
Dimensions	Diameter - 55 mm, Length - 200 mm - logger only | Diameter - 74 mm, Length - 250 mm - with cage
Attachment	Single or double point attachments, with holes for screw attachment and shackles (provided) for rope, shackle or carabiner attachment
MODELS	
AQUA*logger* ® 530WTD	Pressure and temperature logger, depth dependent on pressure sensor
AQUA*logger* ® 530WHSTD	Pressure and high-speed temperature logger, depth dependent on pressure sensor

CITIZEN SCIENCE

Thanks to the high level of automation built into the system, the AQUA*logger* ® 530WTD is an excellent choice for citizen science projects, enabling straightforward operation by users of varying technical experience.

The unit can connect wirelessly to other user devices, providing flexibility in data access and transfer.

For added convenience, laptops/ toughbooks pre-loaded with AQUAtalk software can also be supplied, allowing projects to be deployed quickly and efficiently.