

## DATASHEET

# AQUAlogger® 310PT

Pressure and temperature logger



### KEY FEATURES

- Measure temperature and pressure in a self-contained logger
- High speed sampling - up to 8 Hz
- Real time reporting capability
- Quick start by swiping a magnet against the logger
- Shake the logger to check the status
- Flexible sampling - options for continuous and burst sampling, delayed start, variable sample rates, intermittent logging and averaging

### APPLICATIONS

- Oceanographic and environmental research
- Environmental impact assessments
- Wave and tidal studies

### MODELS

- Standard loggers - temperature & pressure
- Deep water loggers - to 6000m
- High accuracy loggers - high speed temperature and high accuracy pressure



## Sensor specification

<b>Pressure</b>	<p><b>Standard accuracy</b> 5 bar (~40 m), 11 bar (~100 m), 51 bar (~500 m), 101 bar (~1000 m) - standard range 201 bar (~2000 m), 401 bar (~4000 m), 601 bar (~6000 m) - deep water range</p> <p>±0.2% FS accuracy*, 0.01% FS resolution</p> <p><b>High accuracy</b> Pressure ranges - on request ±0.05% FS accuracy*, 0.01% FS precision - high accuracy</p>
<b>Temperature</b>	<p>±0.05°C accuracy, 0.001°C resolution</p> <p>-2 to +35°C standard range</p>

\* Including non-linearity, hysteresis, zero offset and end value deviation (corresponds to measured error per IEC 61298-2).

## Logger specification

<b>Parameters</b>	Pressure, temperature, battery voltage Depth - derived parameter
<b>Memory</b>	64 MB in non-volatile FLASH (standard) 128 MB (Upgrade option 1) - 384 MB (Upgrade option 2)
<b>Logging lifetime</b>	Depends on logging parameters - up to 1 year
<b>Data retention</b>	>20 years
<b>Sampling</b>	Burst or continuous
<b>Acquisition rate</b>	Up to 8 Hz depending on sensors
<b>Burst averaging</b>	Flexible averaging of multiple samples within burst
<b>Communication</b>	USB and either RS232 or RS422 Optional wireless communication upgrade
<b>External interfaces</b>	Compatible comms modules: display, optical modem, acoustic modem
<b>Battery</b>	4 x AA cells - selected from alkaline, lithium or NiMH
<b>Software</b>	AQUA <i>talk</i> for configuration and download
<b>Maximum depth</b>	1000 m - standard model 6000 m - deep water model
<b>Material</b>	Acetal - standard model Duplex, with sacrificial anode - deep water model
<b>Weight</b>	<3 kg in air - standard model <5 kg in air - deep water model
<b>Dimensions</b>	Diameter - 60 mm, Length - 327 mm

## Models

<b>AQUAlogger 310T</b>	Temperature logger, maximum 1000 m depth, standard accuracy
<b>AQUAlogger 310PT</b>	Pressure and temperature logger, depth dependent on pressure sensor, standard accuracy
<b>AQUAlogger 310P<sub>H</sub>T</b>	Pressure and temperature logger, depth dependent on pressure sensor, high accuracy
<b>AQUAlogger 310T<sub>deep</sub></b>	Temperature logger, maximum 6000 m depth, standard accuracy
<b>AQUAlogger 310PT<sub>deep</sub></b>	Pressure and temperature logger, depth up to 6000m, standard accuracy
<b>AQUAlogger 310P<sub>H</sub>T<sub>deep</sub></b>	Pressure and temperature logger, depth up to 6000m, high accuracy

## Contact us

t +44 (0)1256 416010 (UK) t +1-281-220-6035 (USA) e [inquiry@aquatecgroup.com](mailto:inquiry@aquatecgroup.com) [www.aquatecgroup.com](http://www.aquatecgroup.com)

Aquatec House, Stroudley Road, Basingstoke, Hampshire, RG24 8FW, UK