

TEMPERATURE & PRESSURE LOGGERS

AQUAlogger® 520

The AQUAlogger® 520 is a miniature instrument, capable of monitoring accurate temperature and pressure measurements at depths of up to 1000 m. The device is a flexible alternative to thermistor chains, given its self-contained design. The AQUAlogger® 520 is an appropriate instrument for both ocean and environmental applications.



KEY FEATURES

- Measure temperature and pressure in a self-contained logger
- Pressure to depth conversion
- Compact wireless design
- Up to 5 years of battery life
- User-friendly data upload
- Flexible sampling - options for continuous and burst sampling, up to 1 Hz sample rates and averaging

APPLICATIONS

- Oceanographic and environmental research
- Environmental impact assessments
- Temperature distribution surveys
- Long term time series at fixed observatories

SPECIFICATIONS

SENSOR	Pressure <small>* Including non-linearity, hysteresis, zero offset and end value deviation (corresponds to measured error per IEC 61298-2).</small>	Piezo-resistive bridge
		2 bar (~10 m), 4 bar (~30 m), 5 bar (~40 m), 11 bar (~100 m), 51 bar (~500 m), 101 bar (~1000 m)
		±0.2% FS accuracy*, 0.01% FS resolution
	Temperature <small>* high-speed temperature probe with 1 second time constant also available</small>	Thermistor
		-2 to 35°C standard range
		±0.05°C accuracy, 0.001°C resolution
LOGGER		Time constant - better than 5 seconds to 63% of the change in value*
	Parameters	Pressure, temperature, battery voltage, depth - derived parameter
	Memory	> 250,000 parameters readings in non-volatile FLASH
	Logging Lifetime	Typically 5 years, depending on regime
	Data Retention	>10 years
	Sampling	Burst or continuous
	Acquisition Range	Up to 1 Hz
	Burst Averaging	Bursts may be averaged to a single data value
	Logger Communication	Wireless system via separate drop-in reader
	Reader Communication	USB, bus powered
	Battery	3.6V custom lithium 'AA' cell -technician replaceable
	Software	AQUA <i>talk</i> ™ for configuration and download
	Maximum Depth	100 m
	Material	Acetal
	Weight	190 g (6.4 oz) in air, 41 g (1.5 oz) in water
	Dimensions	Diameter - 32 mm (1.3"), Length - 200 mm (7.9")
	Attachment	Single or double point attachments, with holes for screw attachment and shackles (provided) for rope, shackle or carabiner attachment
MODELS	AQUAlogger® 520T	Temperature logger, maximum 1000 m depth
	AQUAlogger® 520PT	Pressure and temperature logger, maximum 1000 m depth (sensor dependent)
	AQUAlogger® 520HST	High-speed temperature logger, maximum 1000 m depth
	AQUAlogger® 520PHST	Pressure and high-speed temperature logger, depth dependent on pressure sensor



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