

DATASHEET

HYDROlog 3000F

Flow monitoring hydrotest logger

The new flow monitoring logger from Aquatec...

...measuring an external flow sensor, high accuracy test pressure and ambient temperature.

The HYDROlog 3000F is a new flow monitoring logger and is part of the HYDRO 3000 generation of hydrotest monitoring equipment. It is a compact logger that monitors one external flow sensor and is both TTL and sine wave compatible. Test pressure to 1000bar and ambient temperature are also measured to depths of up to 4000m. The integral pressure sensor has $\pm 0.05\%$ FS accuracy and $\pm 0.01\%$ FS precision. With increasingly stringent lithium battery shipping regulations, the HYDROlog 3000F overcomes potential transit issues by using standard field-replaceable batteries available across the world. Users can choose the type of battery most suitable for each deployment, whether alkaline, lithium or rechargeable.

The HYDROlog 3000F features the intuitive AQUAtalk software and self-contained compact design, and are compatible with the new higher speed AQUAmodem Op2 optical modem.



KEY FEATURES

The simple way to monitor flow

- Standard instrument monitors one external flow sensor – TTL or sine wave
- Live sensor view via AQUAtalk when connected
- Multiple flow sensors and pressures can be monitored with the HYDROlog 3000Fc custom range, which utilises Aquatec's innovative smart sensor interface.
- Example configuration: 8 flow sensors (measuring flow and concentration) and 3 external pressures

High accuracy and precision pressure

- $\pm 0.05\%$ FS accuracy, $\pm 0.01\%$ FS precision
- A variety of sensor options available – 300bar, 600bar, 1000bar

Flexible deployment

- All instruments log data internally and have real time reporting capability as standard
- Choose your sampling regime with continuous and burst sampling options
- Rated to 4000m, covering typical subsea operations

Durable and robust

- Manufactured from 316 Stainless Steel, the logger is designed for the rigours of operational use.
- All loggers are fitted with sacrificial anodes to reduce the risk of corrosion on long deployments.
- Connectors and anodes are shielded from knocks and are housed within the 60mm diameter instrument.

Designed with operational efficiency in mind

- Deployment wizard to allow quick and easy logger set up
- Test data outputs as an industry standard csv file and report
- Easily transportable with alkaline and NiMH battery options
- Faster download via the new optical modem or serial cable

Hassle-free maintenance

- User-changeable standard AA size batteries available across the world – purchase locally or order direct from us
- Service and support plans available at time of purchase or at any time during ownership

Sensor Specification

Flow sensor type	5V TTL or Sine wave types	
	Pressure	Temperature
Sensor type	Piezo-resistive bridge	Thermistor
Ranges	Absolute: 301, 601, 1001 bar	-2 to 35°C standard Other ranges on request
Accuracy	±0.05% FS over temperature range*	±0.1°C
Precision	±0.01% FS over temperature range	±0.1°C
Resolution	0.002% FS	0.001°C

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

Logger Specification

Parameters	Pressure, temperature, battery voltage, flow rate, flowed total volume, concentration (on custom version)
Data storage capacity	64MB in non-volatile FLASH (standard) Up to 2GB (upgrade)
Logging lifetime	Depends on logging parameters - up to 1 year
Data retention	>20 years
Sampling	Burst or continuous
Acquisition rate	Up to 8Hz depending on sensors
Burst averaging	Flexible averaging of multiple samples within burst
Communication	RS232 or RS422 and USB
External interfaces	AQUA <i>disp</i> subsea display, AQUA <i>modem</i> Op2 optical modem
Battery	4 x AA cells - selected from alkaline, lithium or NiMH
Software	AQUA <i>talk</i> for Windows for configuration and download
Attachment	1/4" NPT, BSP or Autoclave (depending on test pressure)
Maximum depth	4000m
Material	316 Stainless Steel, with sacrificial anode
Weight	<5kg in air

Models

HYDROlog 3000F	External flow sensor, test pressure and ambient temperature
HYDROlog 3000Fc	Multiple flow channels, test pressure, ambient pressure and ambient temperature
HYDROlog 3100F	Surface housing - external flow sensor, test pressure and ambient temperature

Contact us

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