

DATASHEET HYDROskid 3000

Standalone hydrotest monitoring system

The simplest way to monitor a hydrotest...

...measuring high accuracy test pressure and ambient temperature.

The HYDRO*skid* 3000 is a standalone hydrotest monitoring skid, making the monitoring process even simpler for pre-commissioning professionals. The system features the new HYDRO*log* 3000PT instrument - a compact logger measuring test pressure to 1000bar and ambient temperature. The integral pressure sensor has $\pm 0.05\%FS$ accuracy and $\pm 0.01\%FS$ precision. The hydrotest data is recorded on the logger, which includes a secondary power source for redundancy.

The HYDROskid also includes the updated AQUAdisp subsea display, allowing pressure readings to be monitored numerically or graphically. Data can be downloaded via ROV using the new higher speed AQUAmodem Op2 while the HYDROlog 3000 is still logging. The system is switched on by the AQUAswitch subsea switch, making sure it is only active when needed.



This allows you to save battery life and data storage, whilst providing you with a secure way of activating and deactivating your equipment securely at any point during deployment. The system is compact and easy to use, with a single hydraulic connection point and a single connector for subsea download, configuration and surface charging.

KEY FEATURES

Measure test pressure and ambient temperature

HYDROlog 3000

- Test pressure to 1000bar
- 1/4" BSP or Autoclave connection
- Ambient temperature
- · Logging and real time reporting

Activate subsea

AQUAswitch

- Singlehanded operation by a diver or ROV
- Positive detent in on/off position

Easy to connect

- Single point connection
- Instruments are set up and ready to be deployed



Download your data

AQUAmodem Op2

- Short range interrogation, control and data download
- Topside real time view

View your data in real time

AQUA*disp*

- Subsea digital display
- Low power LCD screen showing figures and graphs

Built in redundancy

- Primary power source is a NiMH rechargeable battery
- The HYDROlog has a backup power supply to mitigate against any loss of data

Complete kit

 The HYDROskid is supplied with everything you need to get started, including an ROV side optical modem, ROV cable, charging cable, activator plug, USB cable and PC with pre-loaded software.

Deploy with ease

- ROV grab bars with 20mm diameter
- 2 person lift (50kg)
- Compact size (284 x 512 x 372mm)

Sensor Specification

	Pressure	Temperature
Sensor type	Piezo-resistive bridge	Thermistor
Ranges	Absolute: 301, 601, 1001bar	-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).

Skid Specification

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	Via optical modem during hydrotest Via USB or serial cable topside
Battery	Rechargable NiMH battery (Back up battery in logger - 4 x AA cells - selected from alkaline, lithium or NiMH)
Software	AQUAtalk for Windows for configuration and download
Attachment	1/4" NPT, BSP or Autoclave (depending on test pressure)
Maximum depth	3500m
Material	316 Stainless Steel, with sacrificial anode
Weight	~50kg in air
Dimensions	Max 372 mm (H) x 513 mm (L) x 262 mm (W)
Deployment	ROV grab bar - 20 mm diameter

Models

HYDROskid 3000	Test pressure and ambient temperature
HYDROskid 3000c	Test pressure and ambient pressure with hot stab attachments, valves and hosing Test pressure and ambient pressure with frame to fit customer-supplied baskets or manifolds Flow and gauge pressure also available