

# BUYER'S GUIDE

## **AQUA***disp*<sup>TM</sup>

Subsea display

# AQUAdisp - subsea display

The AQUAdisp™ is a revolutionary subsea display, designed to offer a compact and low power alternative to other comparable instruments. The AQUAdisp can monitor up to 16 parameters and display them over 4 screens. Data can also be presented graphically (on 16 graphs), with options for individual readings or averages to be displayed. The low power technology means there is no need to turn it on or off, but if this is required, both light activation and a magnetic switch can be used. Four versions of the display are available, depending on whether it is to be used with Aquatec instrumentation or third party equipment.

## KEY FEATURES

### Compact LCD display

- Compact subsea display with LCD screen
- Depth rated to 4000 m
- Display data from any instruments with serial or NMEA output
- Compatible with the HYDROlog 3000 range, AQUAlogger 310TY, AQUAlogger 310PT and previous generation instruments

### Flexible display configuration

- Up to 16 parameters with 1-4 shown on each screen (maximum 4 screens)
- Option to display last 30 values or averaged values of each parameter on individual graphs
- Units, graphs and positioning of parameters fully configurable at the point of order
- Change the display set up with pre-set profiles

### Low power

- Low power - can be left on for long periods of time
- Magnetic and light activation switches

### Durable and robust

- Manufactured from 316 Stainless Steel, the display is designed for the rigours of operational use.
- Variable connector placement and mounting holes make it easy to incorporate in manifolds and frames.



### Models to suit different instruments

- Standard model - for use with Aquatec instruments
- NMEA model - for use with a single NMEA instrument
- Serial model - for use with a single serial instrument
- Advanced model - for use with multiple instruments or requiring multiple profiles

### Aquatec services

- System integration
- Custom instruments and accessories – design services for new instruments and customisation



# Using the AQUAdisp

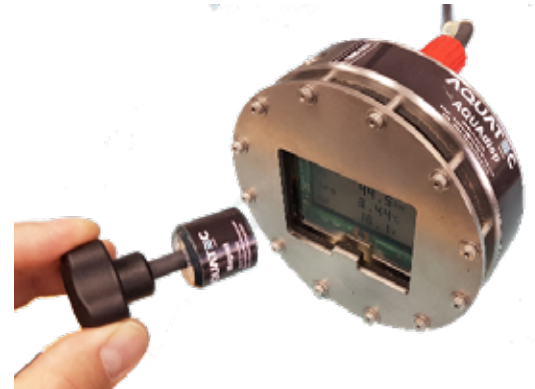
## Operation

The AQUAdisp receives NMEA or serial messages from Aquatec or third party instruments and displays the data on numerical or graphical screens, in a format determined at the point of order. The display is designed to be low power, and has no internal batteries (although this is available as a custom option). External battery packs can be supplied, or the display can be powered from the instrument itself (depending on the type of instrument).

## Activation

There are 4 possible ways to activate the subsea display:

- Magnetic switch - turn on the display with the supplied magnet
- Light activation - activate with ROV or diver lights
- NMEA activation - activate on NMEA message
- Leave on - the low power display can be powered by the instrument it is connected to or external battery packs



## Integration

To assist with integration, the display has the following features:

- Variable connector position - the connector can be located at the back of the display or on the side
- Mounting holes - the display features 2 M6 mounting holes for securing within manifolds etc.
- LED light - an LED light flashes when the display is receiving data - a useful check for deployment



## Visible under ROV lights

The AQUAdisp subsea display is clearly visible under ROV and diver lights, and so there is no need for back lights or power-intensive lights within the display itself.

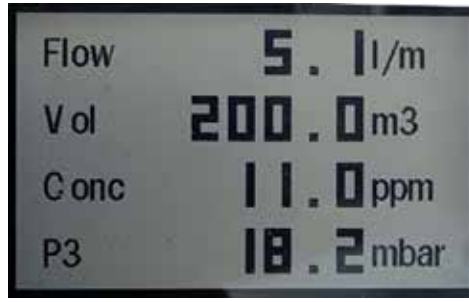


# Screen configuration

## Numerical screens

Up to 16 parameters can be displayed over 4 screens, with units, parameter labels and layout configurable at the point of order.

### Example layouts



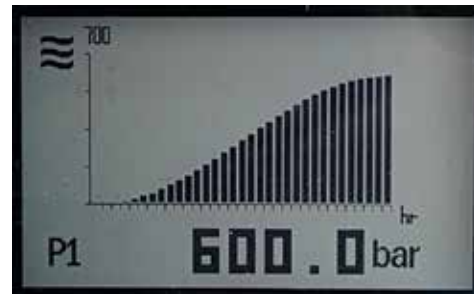
## Graphical screens

Each parameter can be displayed on a graph if selected, with options for autoscaling the Y-axis and averaging the data (1 bar per second / per minute / per hour).

### Autoscale



### Averaging

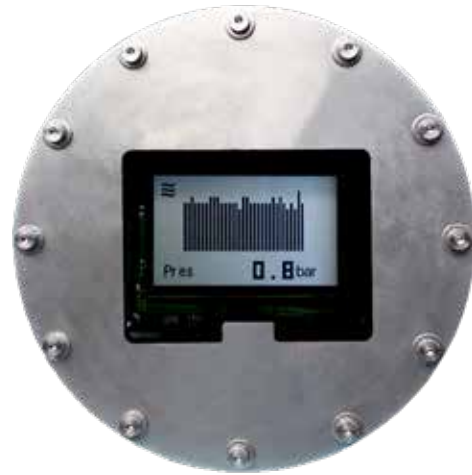


# Selecting your instrument

## Instruments

### **AQUAdisp - standard**

For use with Aquatec instrumentation  
4000 m rated



### **AQUAdisp - NMEA**

For a single NMEA instrument  
4000 m rated

### **AQUAdisp - Serial**

For a single serial instrument  
4000 m rated

### **AQUAdisp - Advanced**

For use with multiple instruments or  
requiring multiple profiles  
4000 m rated

The AQUAdisp is supplied in a transit case with a manual, software and warranty certificate.

## Services

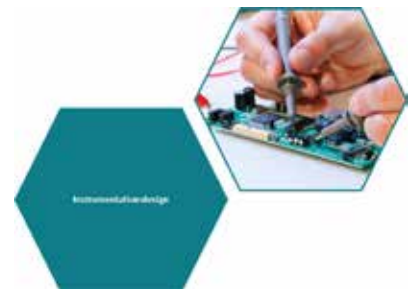
### System integration

Aquatec's system integration service can help you if you are looking to integrate the AQUAdisp into a larger system, add more parameters or instruments, or need custom frames and manifolds for ease of deployment.



### Custom instruments and accessories

Aquatec has been developing and manufacturing subsea instrumentation since 1990, and has a well-established and diverse range of products. Building upon this knowledge and product base, Aquatec offers an instrument design service for those requiring project / application specific instruments and accessories or new instrumentation that is not available as an 'off-the-shelf' product.



# AQUAdisp specification

## Technical specification

<b>Input</b>	RS232
<b>Power</b>	4.2 to 30 VDC
<b>Battery</b>	No internal power - external batteries available on request
<b>Software</b>	AQUAtalk for Windows for configuration
<b>Wake up</b>	Magnetic or light activation, or option to leave on
<b>Connector</b>	MCBH6M
<b>Connector position</b>	At rear or on the side
<b>Mounting</b>	Mounting points provided - 2 x M6 F threaded holes
<b>Dimensions</b>	135 mm diameter, 50 mm depth (excluding connector)
<b>Weight</b>	2.75 kg in air
<b>Material</b>	Stainless Steel 316 with Perspex window
<b>Compatible with</b>	NMEA / serial output instruments HYDROlog 3000, AQUAlogger 310

## Display specification

<b>Parameters - maximum</b>	16
<b>Numerical screen display options</b>	1 - 4 parameters per screen (max 4 screens) Position of numerical values - configurable at point of order Units and parameter labels - fully configurable at point of order
<b>Graphical screen display options</b>	1 parameter per graph Y axis autoscaling on/off Last 33 values shown or data averaged to 1 bar per second / per minute / per hour
<b>Data update rate</b>	Depends on NMEA rate and display refresh rate configured - up to 1Hz
<b>Screen rotation</b>	None or 180 degrees
<b>Contrast</b>	Black on white (default) or white on black

## Models

<b>Standard</b>	For Aquatec instruments
<b>NMEA</b>	For a single NMEA instrument
<b>Serial</b>	For a single serial instrument
<b>Advanced</b>	For multiple instruments or requiring multiple profiles



Aquatec Group Limited

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

[www.aquatecgroup.com](http://www.aquatecgroup.com)

Tel: +44 (0) 1256 416010

Fax: +44 (0) 1256 416019

[inquiry@aquatecgroup.com](mailto:inquiry@aquatecgroup.com)

