

QAS4 Data Sheet

QAS4 enables multi sensor arrays, most commonly magnetometer arrays, to be deployed off small vessels via simple portable TVG frames. Capable of supporting up to 4 x G-882 magnetometers and external serial devices - such as digital altimeters, pitch and roll sensors and sound velocity probes - the QAS4 system has been designed to be versatile. Available with an optional fully integrated 450kHz or 900kHz digital Side Scan Sonar, the QAS4 telemetry system transforms a [Transverse Gradiometer Frame](#) (TVG) frame into a marine multi sensor platform.

Easy, Simple Plug and Play Telemetry.

Designed for simple plug and play operation the Wet end telemetry unit automatically manages and controls communication with the top end power supply. A network is then established between the telemetry system and a PC or laptop for recording data.

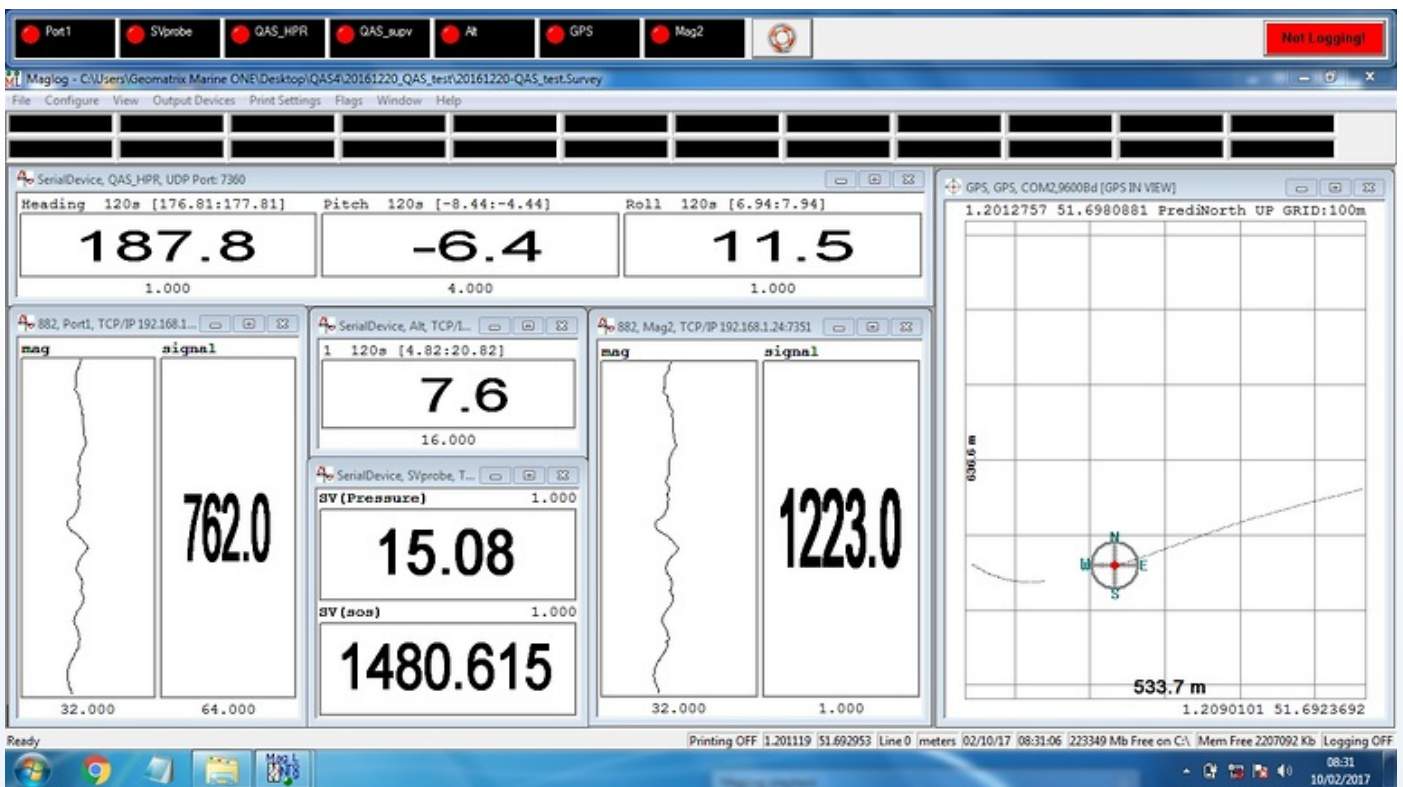


Drawing illustrating the deployment of the QAS4 telemetry system on a Transverse Gradiometer Frame with integrated Side Scan Sonar.

Features:

- 10 Mbps bi-directional Ethernet Link.
- Operates on up to 500m of Standard Coax cable.
- Working Depth of 100m.
- On-board Pitch & Roll Sensor (housed in Wet-End box).
- On-board Side Scan (option)
- 28v & 24v power supplies to external sensors with Voltage & Current measurements.
- Control of power switching to all external sensors.
- Support for 2 G-882 Magnetometers (optionally 4 G882 Magnetometers).
- Auxiliary connector compatible with standard Altimeter Micro SubConn.
- Remote Power Up / Power Down using power over Ethernet.
- Safety Interlock towards coax detects Open Circuit connection.

Each digital device is allocated a unique UDP port number making configuration of bespoke arrays straight forward. A dedicated 6 pin Micro SubConn connector allows the digital serial data from standard Tritech and Valeport altimeters to be recorded directly. No additional hardware required- the altimeter can remain in the nose of the G-882 and a splice cable supplied for connecting both the G-882 and Altimeter to separate ports.



All digital serial device data can be recorded using MagLog.

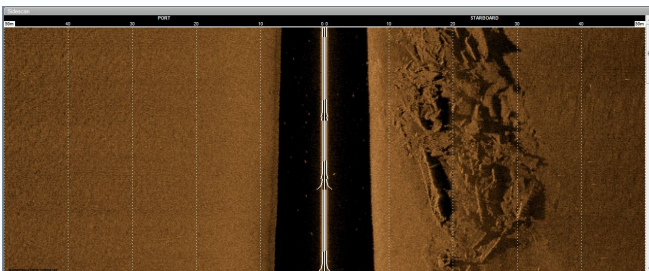
Technical Specifications

Channels:

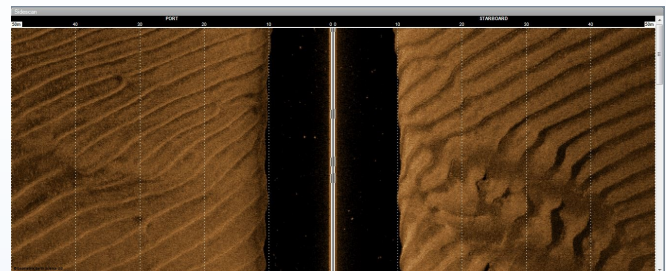
Up to 8 data channels.
4x G882 Compatible sensor connectors (can be used with other sensors); 1 x Auxiliary connector (Altimeter compatible but can be used with other sensors);

	Optional 2 X 3W side scan sensor connectors.
Data Bandwidth:	10 Mbps bi-directional Ethernet Link to top side.
Depth Rating:	Up to 100m.
Cable Specification:	Operates on up to 500m of Standard Coax cable.
Side Scan Sonar:	Optional 450kHz or 900kHz Side Scan Sonar board can be integrated into the telemetry unit.
Power Input:	240v ship supply (optionally 110v).
Instrument Power Supply.:	28v & 24v power supplies to external sensors with Voltage & Current measurements.
Pitch and Roll:	In built digital Pitch and Roll sensor with 0.1 degree resolution and 0.5 degree accuracy.
Connectors:	All industry standard Micro Subconn.

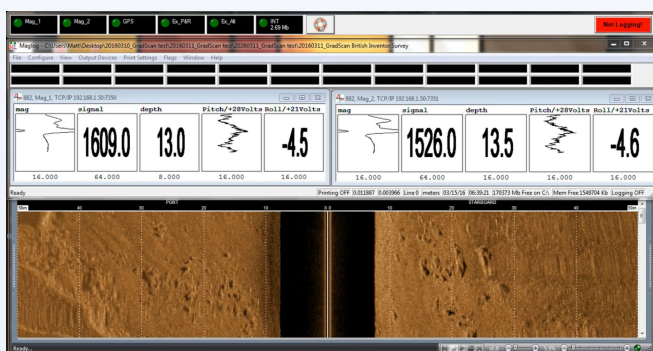
Gallery



QAS4 SideScan Sonar Image of a Ship Wreck



QAS4 SideScan Sonar Image of a Sand Dunes



Data from serial devices is recorded via MagLog whilst Side Scan data is captured and recorded by an independent recording package. depth information from both the Side Scan and digital altimeter can be used to accurately record the height of the TVG frame.

Videos

QAS4 data over the British Inventor.

<https://www.youtube.com/watch?v=dityaTjqAxc>

TVG Frame Recovery

<https://www.youtube.com/watch?v=1-LTKxCeK0w>

TVG Frame Deployment

<https://www.youtube.com/watch?v=rcFZ4mdN5ZM>