

Mag Array Telemetry Data Sheet

Designed with users in mind, the Geomatrix marine magnetometer telemetry system is a simple plug and play devised for short to medium length centre conductor armoured wirelines. Consisting of a Top side power Supply & Wet End Enclosure the system offers up to 8 data channels supporting any combination of digital devices. Providing 12 & 28 VDC power rails the system is capable of running up to 5 Geometrics G-882 magnetometers, digital Gyro, digital altimeter, digital sound velocity probe or any other digital device capable of sending data in serial.

On receiving power from the top end power supply the on board computer directly controllers

The wet end unit incorporates a digital pitch and roll module for monitoring the stability of the towfish frame during deployment.



Mag Array Telemetry wet end unit and top end power supply.

The top End power/data unit has been designed with reliability in mind. No bells and whistles, just simply plug the system into a 240v (optional 110V) mains supply and switch it on. LEDS on the front panel indicates if the top end unit is operating correctly.

The small and compact design of the Wet End electronics package, in conjunction with the innovative design of the Geomatrix TVG frame, allows the unit to be mounted directly onto the tow point assembly without inciting noise into the magnetometers.

Designed for shallow water deployment the TVG Telemetry system can operate on up to 500m of wireline depending on the cable type.

Features

- Supports up to 5 G-882 magnetometers
- External Altimeter
- External Pitch and Roll sensor

Technical Specifications

Wet End:	-----
Channels:	5 as standard (4 x mag and 1 x other digital device), Maximum number of channels is 8.
Connectors:	Micro-subcon (4 x 8 pin for G-882, 1 x 6 pin for altimeter)
Depth rating:	100m
Input Voltage:	150 VDC
Output Voltage rails:	28 VDC
Output Power:	150W, optional upgrade to 180W.
Auxiliary power port (Optional):	12 or 28V 250mA constant current supply for maintaining USBL power. Must be specified at the time of order.
Baud Rate of input devices:	Nominally 9600 baud, but up to 115,200 baud.
Data Bandwidth:	10Mbps bi-directional Ethernet link to topside
Pitch Spec:	0.5 degree accuracy 0.1 degree Resolution
Roll Spec:	0.5 degree accuracy 0.1 degree Resolution
Material:	Machined aluminium
Dimensions (Wet End):	270mmx156mmx98mm (LxWxH)
Top End:	-----
Input Voltage:	240 VAC mains supply (optionally 110V)
Output Voltage:	150 VDC
Data output:	Wired network 10/100Mbps, TCIP protocol.
Wire-line cable length:	Contact suppliers for further information
Dimensions (Top End):	440mmx218mmx131mm (LxWxH)
Rack Mount:	Option for Rack mount power supply. Contact suppliers for further information.