

PIRO 25 Vertical Reference Unit

perform • reliable • practical • versatile

PIRO 25 is developed to be a highly accurate vertical reference unit for marine and offshore applications.

The sensor also meets the requirements of the dynamic positioning industry for accurate vessel roll and pitch measurement and provides accurate motion measurement in all sea conditions.

It employs latest high stability solid state MEMS 3-axis accelerometer and 3-axis gyroscope for excellent long term performance and reliability.

The PIRO 25 is ideal as a functional replacement for old mechanical vertical gyros, which are often more expensive and has lesser long term reliability than modern solid-state sensor. The entire package is specially developed for ease of installation, site setup, interface and minimal maintenance leading to minimum operating cost.

On site setup has never been easier with a separate config port that will not require to interrupt existing field power and data cable.

Luminous LED indication that shows different colours representing different status and fault which allows easy preliminary diagnostics.



Two variants are available on order to suit different retrofit requirement or new installation.

PIRO 25U with main connector on top in upright mount.

PIRO 25D with main connector on bottom in reverse mount.

Key features and benefits :

- Latest solid state solution with minimum drift
- Dynamic roll and pitch accuracy 0.25° RMS
- Configurable 2 channels serial output RS232/RS422 selectable
- Analog outputs scalable
- LED status indication with various representing colours
- Easy configuration by means of bluetooth or serial config port via hyperterminal or android smartphone
- Simple, easy to install and setup for retrofit and new installation
- Export license not required
- No mandatory periodic factory calibration
- No internal battery
- Minimum operating and recurring cost

PIRO 25

Vertical Reference Unit

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Specification - Mechanical		Specification - Electrical	
Protection	IP65	Power source	18 – 32 VDC
Dimension	Ø101mm x H100mm	Measuring range	+/- 30°
Enclosure	Anodized 6061 aircraft grade aluminium	Resolution	0.01°
Weight	1.2kg	Accuracy	0.25°
Connector (main)	Mil-spec Souriau 19-pin	Zero offset error	< +/- 0.1°
Connector (config)	LEMO 3-pin	Maximum offset drift	+/- 0.011° / °C
Temperature range (storage)	-20°C to 70°C	Baudrate	2400 - 19200 bps
Temperature range (operation)	-15°C to 55°C	Serial output option selectable	RS232 / RS422 (isolated)
Mounting bracket (retrofit)	Available for TSS RP30 Re-use for Seatex MRU-D	NMEA 0183 format	PSXN, TSS1, PRDID, custom to order
Cable interconnect (retrofit)	Available for TSS RP30 and Seatex MRU-D	Data output rate	1, 2, 4, 5, 10Hz
Cable specification	High quality screened and twisted pairs	LED indicators	Green – Processor healthy Red – Processor faulty Cyan – Sensor healthy Orange – Analog enabled
		Analog output (optional)	+/- 10VDC (isolated)
		Power consumption	3.6w
		Configuration	Serial interface via hyperterminal or bluetooth



Cable interconnect and versatile mounting options is available for quick retrofit solution without need to lay new field cable and weld new mounting bracket