

INTEGRipod™ NXT

Subsea Data Logger Monitoring System



INTEGRipod™ NXT subsea logger strapped to a LMRP.



INTEGRipod™ NXT subsea logger strapped to a riser & attached to (Optional) Acoustic Transponder.

The INTEGRipod™ NXT platform has been specifically developed to meet the needs of the offshore oil and gas industry in the current market; offering industry-leading features such as **semi real-time acoustic capabilities**, **on board data processing**, and **extended life in excess of a year** in a standard, modular format. Along with a range of new features, the new NXT platform supports the INTEGRipod's impressive track record of reliability and robust performance, proved in millions of hours of successful ultra-deepwater subsea operations since the product range launched in 1998.

Applications

- Wellhead Fatigue Monitoring Assessment
- BOP Motion and Displacement
- Flexible Joint Angle Deflection
- Drilling and Production Riser Monitoring
- Subsea Structures Vibration Monitoring
- Mooring Line Monitoring
- Subsea Pipeline FIV, VIV, and Span Monitoring

Measurements

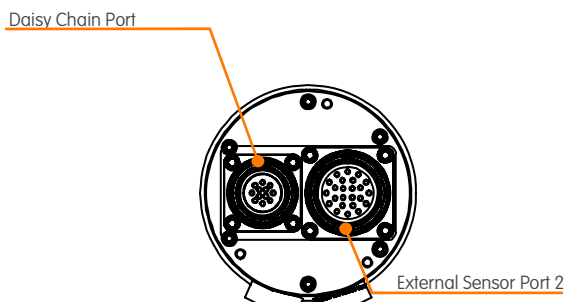
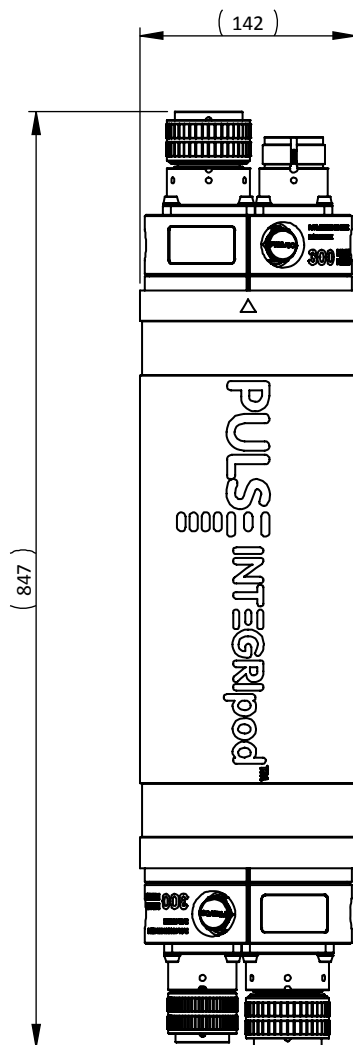
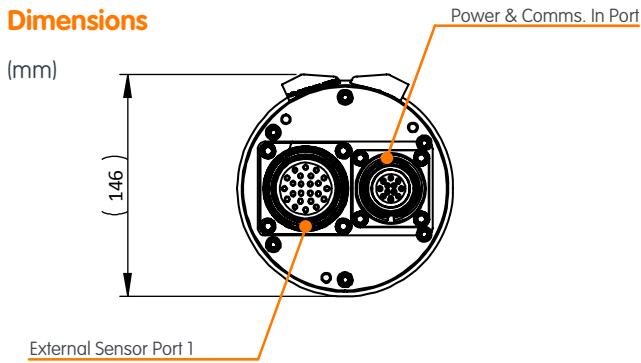
- Tri Axial Acceleration
- Tri Planar Angular Velocity
- Linear Displacement
- Static and Dynamic Inclination

Product Features and Benefits

- **Semi Real-Time Acoustic Capabilities**
The platform allows communication over various connectivity options in addition to the default standalone logging, including full compatibility with all major 3rd party acoustic transponders.
- **On Board 32-bit ARM™ Powered Data Processing**
Smart processing provides statistical data in a format that adds immediate value to the Client (e.g. remaining fatigue life).
- **Low Power Consumption and Large Memory Capacity**
Improved battery life and "Smart Threshold Detection Logging" leads to longer campaign lengths in excess of 1 year which enables lower installation and retrieval costs. The large memory capacity allows for continuous data collection through multiple monitoring campaigns.
- **External Sensor Connectivity Options**
Seamless integration with Pulse's patented INTEGRistick and INTEGRistrain direct strain sensing technologies in addition to 3rd party sensors (e.g. pressure or temperature).



Dimensions



Equipment Specifications

Product Order Code

(Standalone) 95033.01
(Standalone + Acoustic) 95033.02

Power

Supply Source	Li-SOCl ₂ Internal Battery Module
Supply Voltage	14.4 V
Battery Capacity	170 Ah
Steady State Current Consumption	30 mA
Standby Current	12 mA

Estimated Battery Life

(Standalone) 95033.01	
10Hz, continuous	9 months
10Hz, 15 mins every 2 hrs	12+ months
(Standalone + Acoustic) 95033.02	
Dependent on Transmission Interval	6 - 12+ months

Data Logger

Supported Sampling Rates	1 Hz - 1.7 kHz
Memory Capacity	Up to 64 GB
Communications Interfaces	EIA-RS232 / EIA-RS485 / USB 2.0
Acoustic Modem Compatibility	All Major 3 rd Party Transponders

Environmental

Product Dimensions	142Ø x 847 mm
Operating Temperature	-40 to 30 °C
Storage Temperature	-40 to 150 °C
Weight in Air	33 kg
Weight in Water	15 kg
Housing Material	Superduplex Stainless Steel
Depth Rating	300 bar, with safety PRV
Cable Interface	Seacon™ SEAMATE Connector

Internal Sensors

Accelerometer

Degrees of Freedom	3
Range	±/-19.6 m/s ²
Resolution	5 µm/s ² RMS
RMS Noise	0.00591 m/s ²
Frequency Response	0 to 1 kHz

Angular Rate

Degrees of Freedom	3
Range	±4 °/s
Resolution	2 µ°/s
RMS Noise	0.07 °/s
Frequency Response	0-10 Hz

External Sensors

INTEGRistick*

Degrees of Freedom	2
Range	±500 µε
Resolution	0.001 µε
RMS Noise	0.06 µε
Frequency Response	0 to 300 Hz
Accuracy	4 µε @ 25 °C

Strain Gauges

Degrees of Freedom	8
Range	±2300 µε
Resolution	0.0003 µε
RMS Noise	0.3 µε
Frequency Response	0 to 300 Hz

3rd Party Sensors

Communication Interface Protocol	EIA-RS232 / EIA-RS485 Application specific
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*Values are application dependent. Values shown for a typical riser diameter of 11.75". Only 1 INTEGRistick permitted per logger.