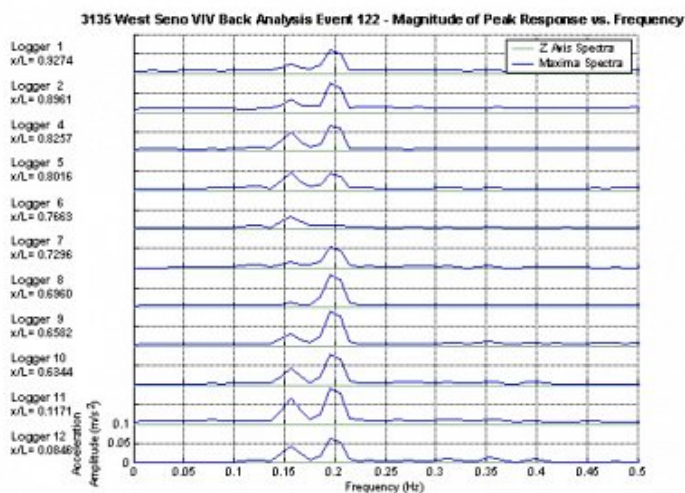


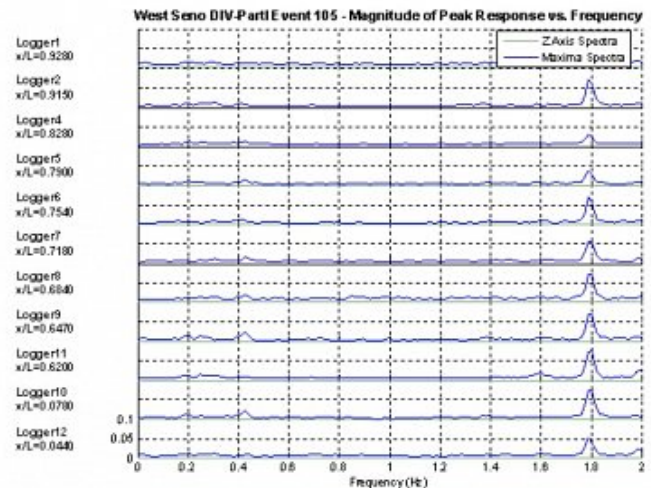
ADL-526 Data Sheet

The Model ADL-536 Acceleration Monitor and Logger is a highly reliable, proven instrumentation package developed by FSI to measure displacements of risers, Pipelines, and other structures. As deployments continue to go ever deeper, it has become critical that riser responses to vortex induced vibrations (VIV) and drilling-induced vibrations (DIV) be monitored for fatigue analysis. The ADL-536 provides a robust, easy-to-deploy, and cost-effective method to ensure safe and profitable operations of field resources.

Sample VIV Data



Sample DIV Data



Example Vortex Induced Vibration (VIV) and Drilling Induced Vibrations (DIV) events. Courtesy of Falmouth Scientific Inc.

Lightweight, compact and rugged, these units are simple to deploy and retrieve. Attachment to risers can be done pre- or post-deployment. Innovative ROV-deployable clamps facilitate instrument handling. The unit is equipped with an external connector to provide for optional processing of 5 additional channels of analog data with 12 bit resolution. This capability will allow input of sensor measurements such as strain gauges or load cells and other desired parameters. Contact your FSI representative or the factory directly for further information on customised settings, telemetry options, and additional sensors for the FSI ADL-536 Riser Acceleration Monitor and Logger.

Features

- Three axis acceleration and 2 axis inclination sensors for analysis of VIV, DIV, and other stress events.
- Processor control allows flexible datalogger programming.
- Accurate real-time clock for data synchronisation.
- Easy to implement interface with acoustic modem for real-time data acquisition
- 3000 meter operating depth standard, deeper operation optional.

Product Dimensions

| Physical | Dimensions (L x W x H) | Weight |
|-------------------|---------------------------|--------|
| (instrument only) | 53.34cm x 8.25cm x 8.25cm | 5,72kg |

Technical Specifications

| | |
|-------------------------------------|---|
| 3 Axis Accelerometer Sensor: | Input Range: ± 1 g Sensitivity: 1 V/g Bandwidth: DC - 50 Hz |
| 2 Axis Inclination Sensor: | Linear Angular Range: $\pm 20^\circ$ Full Angular Range: $\pm 78^\circ$ Sensitivity: 35 mV/ $^\circ$ Resolution: 0.01 $^\circ$ |
| Optional Pressure Sensor: | Full Scale Pressure: 1500 psi standard, Other pressures optional Accuracy: 0.1% full scale Resolution: 0.1% full scale |
| Optional Temperature Sensor: | Temperature Range: -2 to 40 $^\circ$ C Accuracy: 0.5 $^\circ$ C Resolution: 0.05 $^\circ$ C |
| Processor: | PIC Microcontroller. |
| Internal Memory: | 256 MB (additional memory optional). |
| Real-Time Clock Drift: | ± 5 ppm |
| Serial Communication: | RS-232, RS-485, or CMOS. |
| Sample Rate: | 30 Hz (User selectable). |
| Telemetry: | Optional, integrated real-time acoustic modems. |
| Power Supply: | External power input 6 to 15 VDC. |
| Operating Life: | 240 hours continuous with standard alkaline battery. |
| Depth Rating: | 3000 meters standard, deeper depths optional. |
| Pressure Housing: | 316 SS, Titanium optional. |