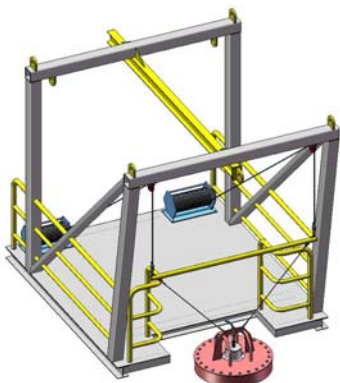




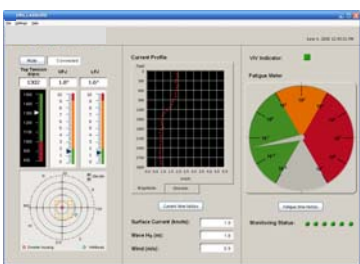
Seabed deployment of 75kHz ADCP



Platform installation 38 kHz ADCP



Web based access to ADCP Data



On-board display example



Environmental conditions and platform motion affect exploration, drilling, and development operations of offshore floating facilities. In order to provide operational decision support, and validate design based on field data, we developed the **MARINEASSURE™** monitoring system.

SYSTEM DESCRIPTION

A **MARINEASSURE™** package is a set of sensors and a data acquisition system for structural and environmental monitoring of offshore facilities. The package is configured to meet operational and regulatory requirements. The monitoring equipment can be retrofitted to an existing offshore facility, or integrated into a new-build offshore facility.

The measurement parameters for **MARINEASSURE™** include:

Vessel monitoring

- Location (GPS and DGPS)
- Vessel draft
- 6-DOF motion (wave frequency)

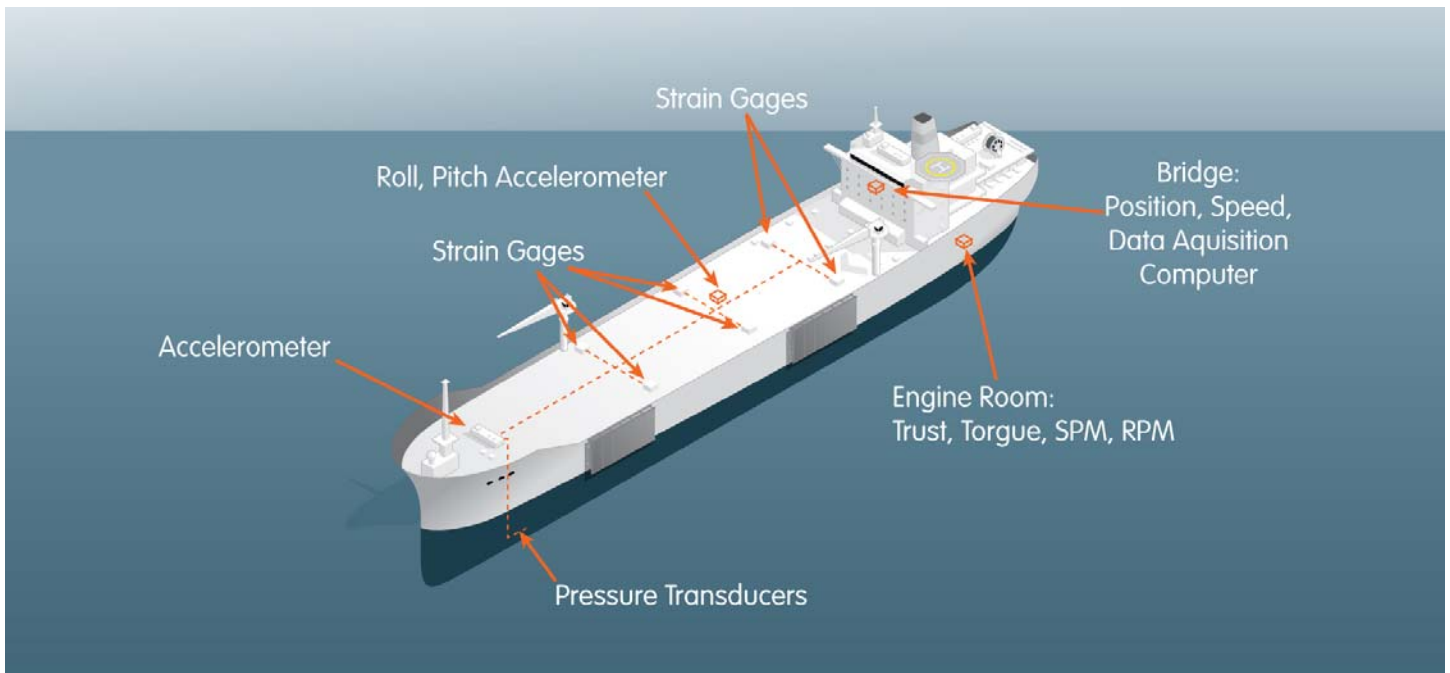
Environmental monitoring

- Wind speed and direction
- Air temperature and pressure
- Ocean current speed and direction (ADCPs)
- Wave height and direction

The package can be expanded to include other sensors as required including riser monitoring, mooring monitoring, ballast levels, engine room sensors etc. The data acquisition system is capable of collecting data from sensors as well as via Ethernet connection to monitor other processes.

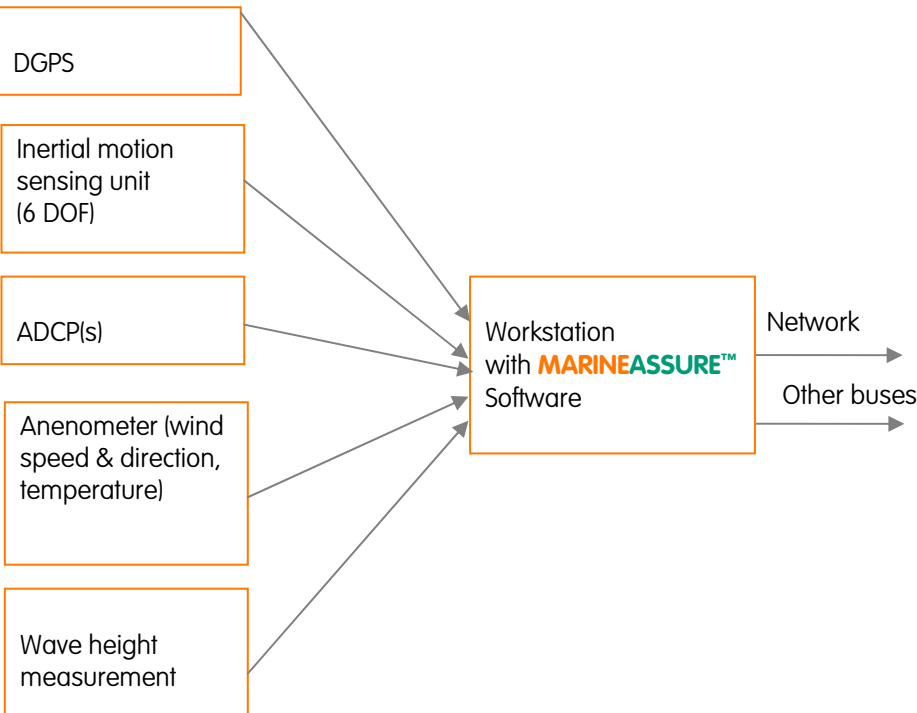
FEATURES

- Real-time vessel and environment data for operational decision support
- Integration of field-proven standard off-the-shelf devices
- Allows operators to meet regulatory requirements
- User-friendly on-board data display
- Interactive web-based access for onshore access
- Feedback to validate the engineering models



The Pulse Advantage

- Turn-key solutions for marine vessel and environmental monitoring
- Over 10 years of experience in PM, engineering and installation of offshore monitoring instruments
- Global servicing capability working closely with Acteon group of companies
- Over 80 ADCPs and hundreds of other sensors readily available for deployment
- 24/7 service commitment



DATA MANAGEMENT

The measured data from a number of vessel and environment monitoring system is gathered at an on-board data acquisition system. The monitored data is archived on-board and a back-up is stored at a 24-hour manned facility onshore. A user-friendly display is provided onboard for operations personnel. The data can also be viewed through web access for onshore support personnel.

Pulse has extensive experience in monitored data processing. We can provide onboard riser management tools to process the data onboard.



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