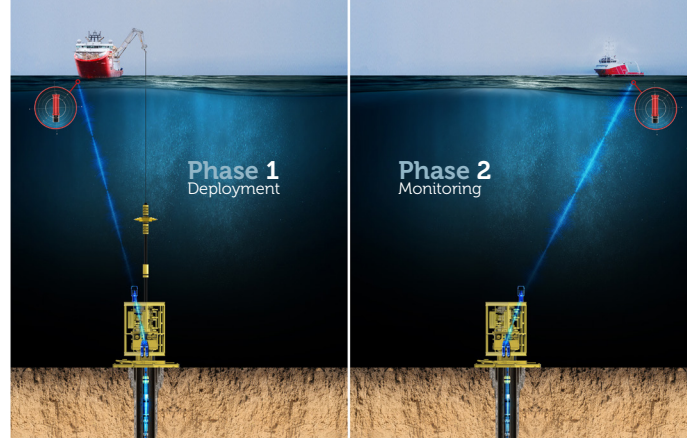


# SENTINEL-BM™

WIRELESS BARRIER MONITORING FROM METROL

Accessing barrier integrity data in a subsea environment is possible using the SENTINEL-BM system. In a dual barrier set-up data can be accessed from numerous sensors to verify each barrier.

Communication with the gauge is two way, and allows fast scan rate gauge data to be changed and viewed real-time adding certainty in leak detection.



## DESCRIPTION

P&A work in a deepwater environment is inherently expensive and the use of a Light Well Intervention Vessel (LWIV) significantly reduces the cost of decommissioning. Barrier pressure integrity can be continuously monitored using a LWIV.

In some cases, wireless systems have resulted in project savings of up to \$2million per well. This has been accomplished by removing the requirement to install dual bore riser, and additional pressure control equipment, when a rig eventually returns to perform the final stage of abandonment.

Wireless telemetry de-risks the operation by monitoring the well as an offline activity, without any requirement for intervention.

Applications include:

- > Well suspension
- > Abandonment
- > Well intervention
- > Subsea tree repair and change out
- > Well phase transition between completion and production

## FEATURES & BENEFITS

- > Retrofit capability into any existing subsea or downhole completion
- > Extensive run history and thousands of tools runs
- > Offline data interrogation
- > Accurate upper barrier verification, in dual barrier scenario
- > Compatible with any third party plug
- > Saves OPEX by significantly reducing the time a drilling rig needs to spend over a well
- > Safer well operations by removing any e-line intervention
- > Keeping the subsea XT in place while well barriers are monitored improves the safety case, and sets a standard that helps meet legal requirements and industry good practice

## SPECIFICATIONS

MWP 10,000 psi, 16,000 psi or 20,000 psi  
 OCULUS ST: -20 to 150°C  
 OCULUS HT: 0 to 177°C  
 OCULUS XT: 0 to 192°C  
 Memory capacity: Up to 3.2 million data sets

Resolution: pressure 0.00025% of reading  
 +0.01psi (eg 0.02 psi @ 4,000 psi)  
 – temperature : 0.05°C  
 Accuracy: ± 0.025% of full scale  
 (± 2.5psi on 10,000 psi gauge), ±1°C

Water depth: up to 10,000ft  
 Collection speeds: Up to 7,500 p/t  
 points per hour



Specifications subject to change without notice.  
 Multi year options, design life available on request.

Discover more at [www.metrol.co.uk](http://www.metrol.co.uk)