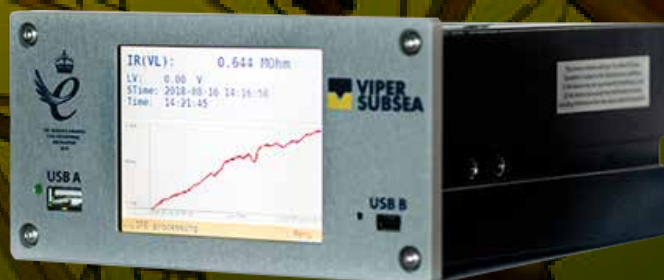


INTRODUCING

**V-LIFE<sup>®</sup>**

INSULATION  
RESISTANCE RECOVERY



THE QUEEN'S AWARDS  
FOR ENTERPRISE:  
INNOVATION  
2016

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**V-LIFE IS A  
PREVENTATIVE  
AND ACTIVE  
'HEALING'  
SOLUTION OF  
LOW INSULATION  
RESISTANCE  
CAUSED BY  
WATER INGRESS.**



**V-LIFE®**

**A VIPER INNOVATION**

# V-LIFE IS DESIGNED TO RECOVER THE ELECTRICAL INTEGRITY OF SUBSEA CIRCUITS

## The Insulation Resistance (IR) problem

The most common cause of subsea electrical failures is the ingress of water into the cable insulation, which decreases the IR and may produce short circuits or leakage to earth. These faults often lead to loss of power and/or communications to subsea equipment and have the potential to halt production from subsea wells. Historically, subsea fault-finding interventions and the replacement of cables, equipment or even umbilicals have been the only solution to this problem.

## The solution

**V-LIFE** operates as both a preventative measure and active 'healer' of insulation. The topside installed **V-LIFE** enabled **V-LIM** deploys an electro-kinetic and electrochemical process which minimises and mitigates the effect of water ingress into the insulation and increases the IR of the system. No subsea intervention is required.

Additional support is provided as part of the **V-LIFE** service in the form of condition reports, trend analysis and recommendations.

**V-LIFE** is currently implemented on control systems supplied by five different OEMs. Widely used by 18 operators globally, **V-LIFE** is the leading alternative to subsea interventions.

## Key benefits

- Increases IR without subsea intervention
- Recovers multiple IR failures throughout the system
- Extends the life of failing umbilicals and electrical distribution equipment
- 'Buys time' whilst a new umbilical is procured
- Used as an alternative to installing new, costly and long-lead time umbilicals
- Used to delay early field abandonment
- **V-LIFE** 'finds' the points of water ingress, no diagnostics required.



## Key features

- Compatible with comms on power systems
- Provides all the features of a Line Insulation Monitor including IR measurements and configurable alarms/trips
- Compatible with power and/or signal lines
- A range of installation options to suit all field applications
- Displays IR measurements graphically in real time
- Compatible with single or three phase systems
- Basic control and configuration through a graphical touch screen LCD
- Advanced control and configuration via USB and Ethernet interfaces
- Typically recovers IR from kΩ to MΩ within a few days.

## Insulation monitoring standards

IEC 61557-1: 2007  
IEC 61557-8: 2014

### Notice

Product complies with Part 15 of the FCC rules, subject to the following two conditions: 1. The device may not cause harmful interference. 2. This device must accept any interference received, including interference that may cause undesired operation.



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