

CoreTEST Substation

Continuous Monitoring

The CoreTEST equipment is located at the substation on either end of the cable to continuously monitor and immediately alarm if cable damage occurs.

Historic Analysis

Analysis of the data over the long term allows subtle cable movements to be identified.

Alarm Notification

If user defined limits are exceeded alarms are sent via audio, email or SMS text message. The GPS location of the fault is included in each message to accurately pinpoint the location of the problem.

AIS Marine Traffic

Integration with the AIS Marine Traffic database allows the location of all vessels in the wind farm area to be recorded along with each test result. Should trawl or anchor damage occur all vessels in the area at the time are known.

SCADA Integration

Alarm conditions can be sent via a number of industry standard protocols (Modbus, OPC, DNP3 or IEC 60870)



CoreTEST Substation proactively monitors offshore array and export cables up to 150km in length. Cable damage is identified in real time. A fully graphical display continuously shows the quality of the cable at all times. Audio, email or SMS alarms are triggered if cable limits are exceeded to immediately warn of problems with the cable integrity.

Mapping

The route of the cable and the exact location of any fault is displayed on a fully zoomable map. All alarms include the precise GPS location of the fault to reduce time finding and repair time.

SCADA Integration

In addition to sending notification by email or SMS text message the alarm status can be integrated to the substation control system using a number of industry standard protocols.

- Modbus
- OPC / OPC XML / OPC UA
- DNP3
- IEC 60870

Monitoring Repairs

CoreTEST can be temporarily deployed to monitor power cables during repair or maintenance work. Any damage or stress on the cable is immediately alarmed.

Proactive Asset Monitoring

Testing at frequencies that are particularly sensitive to bending allows subtle sea bed condition changes to be identified. Issues such as scouring causing exposure of the cable can be identified when analysing the historical data.

All 288 Cores Tested

CoreTEST Substation tests power cables with up to 288 fibre cores although larger units are available on request. All cores in a cable are tested in turn or specific individual cores can be selected for intensive testing.

Saving time and money

Thanks to the continuous test method and fully integrated GPS mapping any cable problems are identified sooner than with traditional methods. Precision mapping allows maintenance teams to be guided to the exact location of the fault.

For more information or to arrange a demonstration or visit to a site please email info@optalay.com.