

C-Kore

Simplify Subsea Testing

FAST • AUTOMATED • RELIABLE • SAFE



IR • CONTINUITY • TDR • OTDR • SENSORS • PRESSURE

Subsea tools for fault-finding, installation & decommissioning campaigns



Subsea tools for fault-finding & decommissioning campaigns

C-Kore's patented subsea testing tools perform fast automated testing for subsea fault-finding, installation and decommissioning work. Operations are completed much faster, saving customers time and money by reducing vessel days

Simplify Subsea Testing

By automating the entire testing process, subsea testing is completed much faster with C-Kore's Subsea Testing tools, saving days of vessel time. The automated tools are easy to deploy and operate without the need for C-Kore personnel being present, providing rapid and accurate feedback. This combination of simplicity, accuracy and reliability introduces significant operational savings to all types of testing campaigns.

- ✓ Save multiple days vessel time
- ✓ Obtain quick & reliable results
- ✓ No specialist personnel required
- ✓ Safe for divers & electronics

C-Kore Cable Monitor
Monitor the health of electrical lines, measuring insulation resistance & continuity



C-Kore Electrical TDR
Precisely locate faults and discontinuities on electrical lines



C-Kore Optical TDR
Prove optical fibre health and locate faults and discontinuities



C-Kore - safe for use on all subsea infrastructure, giving you better data, faster

KEY BENEFITS

✓ Automated

Easy to operate, specialist personnel not required. C-Kore can be pre-programmed by C-Kore Systems or easily configured in the field. Repeatable automated measurement removes operator delays, errors and differences.

✓ Fast

Measure assets directly subsea for substantial vessel time savings and reliable results without downlines. Automated testing saves time and personnel costs. No need to wait for slow platform-led testing or down-line deployment

✓ Reliable

Direct subsea measurement removes risks and uncertainties from downlines and intervening equipment. Track asset health from factory to subsea hookup. Units are environmentally sealed and directly connected to equipment, removing effects of adverse weather and humidity.

✓ Safe

Innovative low-voltage design provides safe and easy diver operation, is safe for SCMs and does not require permits.

C-KORE RENTAL SERVICE

- Fully calibrated tools
- Procedure / Report writing / On-call support
- Expert Data Analysis and on-call support
- On-Line Interactive Training

**EASY
TO USE!**

C-Kore in action
Simple to deploy and operate
with either divers or ROVs.



C-KORE CABLE MONITOR

Identify faulty components within existing fields and monitor the health of new components (e.g. umbilicals) during construction campaigns.

C-Kore's Cable Monitor is used on both fault-finding and construction campaigns. It is fast and simple to deploy to get accurate data on the health of subsea assets. By measuring directly subsea, substantial vessel time and cost savings are made, allowing faults to be readily found and fixed with shorter campaigns.



C-KORE SUBSEA TDR

Precisely locate faults and discontinuities within electrical cables during fault-finding and characterise new components during construction campaigns.

The Subsea TDR is used in tandem with the Cable Monitor for precisely locating faults during fault-finding operations. The Cable Monitor narrows the location of the fault to a single component (for example an in-field umbilical). Then the TDR precisely identifies where in the cable the fault resides. By measuring directly subsea, the problems of deck-based downline testing are eliminated, including impedance mismatches, attenuation, faulty downlines and the difficulty of driving the TDR correctly.



C-KORE SENSOR MONITOR

Read sensor values during construction or decommissioning for safety and certainty. Monitor sensor health during fault-finding campaigns.

The C-Kore Sensor Monitor allows users to monitor subsea instruments at times when they are not readable via the controls system, such as during Xmas Tree installation and decommissioning. It can power and read various types of analogue and serial instruments measuring pressures, temperatures, and flows etc.



C-KORE SUBSEA OTDR

Prove optical fibre health and locate faults in both fault-finding and construction campaigns.

C-Kore's Optical TDR precisely locates faults and discontinuities with fibre optic cables during fault-finding operations and proves new cables during construction campaigns. The tool allows measurement to be made directly subsea. It is configured in advance, automating the entire testing process so no specialist offshore personnel are required.

C-Kore tools find faults in existing fields and monitor the health of new subsea assets during installation. They work on umbilicals, EFL's, SCM's, distribution units and wellhead sensors



Results shown on built-in OLED display. Sequence and timing of results is fully configurable. Shown are insulation resistance, continuity and capacitance measurement results.

✓ Find Faults Fast

C-Kore subsea measurement tools find faults and monitor the health of umbilicals, jumpers, control modules, down-hole sensors (or anything else) without using downlines. The tools save days of vessel time allowing more to be achieved in every offshore campaign.

Mobilisation and deployment are simple. The measurement program is automated, dramatically speeding up the testing process and reducing the risk of human error.

The tools are not much larger than standard dummy plugs, allowing simple hand-carried mobilisation and easy handling for divers and ROV.

✓ Streamlined Construction

C-Kore subsea measurement tools eliminate slow and cumbersome manual measurement and downline deployment during construction campaigns. They are used to monitor the health of equipment during transit, installation, post-install verification and wet-storage. Faults are found immediately giving time for remediation with time-stamped datalogged results.



Safe for use on all subsea infrastructure, giving you better data faster

- **Electrical cables** – umbilicals, power cables, flying leads, jumpers
- **Optical cables** – umbilicals, flying leads, downhole
- **Subsea sensors** – pressure, temperature, others
- **SCMs & SDUs** – subsea control modules, distribution units and manifolds
- **DHPT** – down-hole sensors and cables
- **Hydraulic and fluid lines**

For more information please visit our website: www.c-kore.com

Tools to solve any problem

C-KORE UNITS CONNECTORS AND BODY SHAPES

Available connector families, others on request



Siemens Tronic



Teledyne Nautilus



Diamould

Available as both ROV & diver-mate, both genders and bulkheads



ROV Mate



Diver Mate

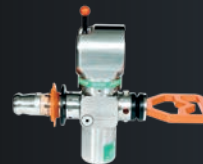


Bulkhead

Available body shapes to ensure clash-free connection on subsea structures



In-Line



T-Shape



L-Shape

C-KORE COMMON FEATURES



Depth Rated

Standard products are rated for 3000msw (connector permitting)



Data Logger

Every measurement saved for future download and analysis



Connector Support

Wide range of subsea measurement connectors stocked/supported



USB Configuration

Plug and play USB connection for easy configuration in the field



Physical Shock

Measures impacts, acceleration and orientation changes



Reporting

Automatic report and spreadsheet generation from test results



Battery Life

Low power design gives C-Kore units long mission life



OLED Display

Instant measurement feedback on the built-in display



Wireless

Subsea and surface modem accessories for instant data retrieval



Multiple Triggers

Configurable light, proximity and schedule triggers to start measurements



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