



## SENSOR MONITOR

- ✓ Ensure safe environment for divers & prevent accidental hydrocarbon release
- ✓ Reduce vessel and personnel costs with fast automated testing
- ✓ Measure directly subsea for repeatable, reliable test results

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

The C-Kore Sensor Monitor is a fast and automated subsea tool for reading subsea sensors. It supports an extensive range of pressure, temperature, positional and other sensors and does not require any subsea infrastructure or downlines to operate.

It can be used for construction, fault-finding and decommissioning campaigns. Compared to using downlines it is fast and simple to deploy to get accurate data on the state of subsea assets. By measuring directly subsea, substantial vessel time and cost savings are made, allowing more work to be completed in shorter campaigns. The Sensor Monitor is simple to use while remaining a very versatile product.

### Construction and Decommissioning

- Display sensor data before or after the SCM and data-link are available
- Automatic logging of every measurement to internal memory
- Provide otherwise unavailable feedback of wellhead pressures and temperatures
- Ensure safe diving conditions
- Prevent unintended release of hydrocarbons into the environment

### Fault-finding

- Quickly identify faulty sensors
- Prevent unnecessary change-outs and troubleshooting
- Save significant vessel time and costs
- Use in tandem with the Cable Monitor to find other possible fault sources

The unit is powered by a high-capacity rechargeable battery for stand-alone operation. Simple user configuration is possible with a plug-and-play USB connection to choose what the unit will test and when. Every result is data-logged, with large internal storage allowing extensive data to be gathered.

## KEY FEATURES



### Current-Loop Sensors

Read current-loop outputs and display result as sensor value. Measurement of 0-20mA with 2, 3 and 4-wire modes



### Voltage Output Sensors

Test voltage outputs and convert the result to a sensor reading. Measurement of 0-20V with 3 and 4-wire modes



### Digital Sensors

Read sensors using a digital protocol. Please get in touch to discuss your application



### Physical Shock

Measure impacts, acceleration and orientation changes. Logs shocks up to 200G in all 3 axis



### Temperature

Monitor environmental conditions during storage and transit. Accurate measurement over complete temperature range



### Datalogging

Programmable for high-resolution or long-duration measurement. Every measurement saved for future download

# TECHNICAL SPECIFICATION

## Measurement

**Sensor Compatibility:** 0-20mA / 4-20mA / 0-10V / 2-10V  
(For digital sensor types, please contact us for details).

**Voltage Range:** 0VDC to 24VDC

**Current Range:** -800mA to +800mA

**Connection Modes:** 2, 3 & 4 wire interfaces.

**Display Units:** User defined offset, scaling and units convert raw data to sensor value.

**Datalogging:** All measurements logged in internal memory.

**Number of Inputs:** From 2 to 12 (factory-programmable).

**Supply Voltage:** Programmable supply voltage 5VDC to 24VDC

**Input Protection:** Inputs and supplies fused.

**EMC Protection:** Input filtering to reduce conducted and radiated interference.

**Measurement Safety:** Low energy/low voltage measurement system meets the IMCAD045 standards for safe use of electricity underwater. This eliminates any hazard to personnel while in use and prevents the test energy from further damaging faulty connectors or sensitive subsea electronics.

## Physical Information

**Compatibility:** Standard availability for ODI Nautilus and Siemens DigiTRON connectors. ROV and Diver varieties. Available in 4, 7 and 12 pin versions. Other connector types on application, including Siemens Mini-CE.

**Operating Depth:** Dependent on connector type, see interface drawing for details. Typically 3000msw, unless limited by measurement connector.

**Handling:** C-Kore uses entirely standard wet mate connectors and can be handled in the same manner as these items.

**Installation:** C-Kore can be connected/disconnected at any time and can be used by a diver or ROV as a hand-held test instrument.

**Operating Temperature:** Recommended: 0°C to +40°C  
Maximum dependant on connector type:  
Teledyne ODI Nautilus ROV: -10°C to +50°C  
Siemens DigiTRON ROV: -5°C to +60°C

**Storage Temperature:** Recommended: 0°C to +25°C  
Maximum dependant on connector type:  
Teledyne ODI Nautilus ROV: -20°C to +50°C  
Siemens DigiTRON ROV: -20°C to +50°C

**Size:** Dependent on connector type, see interface drawing for details.  
Example dimensions for 7-Way ROV Plug variants:  
Teledyne ODI Nautilus: 331 x 258 x 118 (mm)  
Siemens DigiTRON: 355 x 258 x 124 (mm)

**Weight (in air):** Dependent on connector type, see interface drawing for details.  
Example weights for 7-Way ROV Plug variants:  
Teledyne ODI Nautilus (Titanium): 5 kg  
Siemens DigiTRON (Stainless Steel): 7 kg

**C-Kore Systems Ltd**  
York, North Yorkshire,  
YO19 6ET, United Kingdom

**Tel:** +44 (0)1904 215161  
**Email:** sales@C-Kore.com



**C-Kore**  
Simplify Subsea Testing

[www.c-kore.com](http://www.c-kore.com)