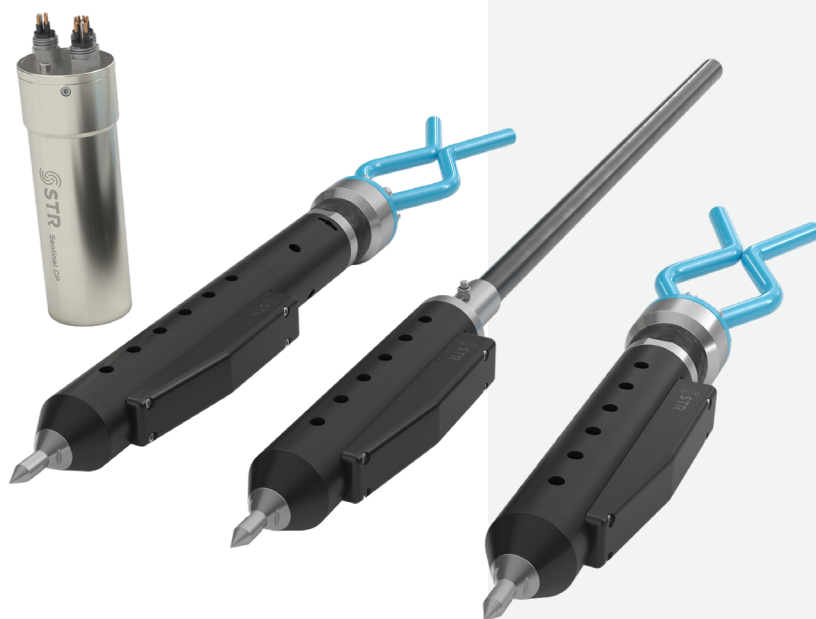

Sentinel CP

The STR Sentinel CP Inspection System is a complete contact, proximity & Field Gradient solution for performing cathodic protection (CP) inspections with high accuracy and efficiency. The system is specifically designed to support rapid and reliable data acquisition in subsea environments.

At the core of the system is the STR Sentinel Proximity, Contact, and Field Gradient Probe, a dual-reference CP probe intended for use as a corrosion testing sensor on remotely operated vehicles (ROVs). The inclusion of a secondary reference electrode enables continuous, real-time verification of probe performance, ensuring measurement integrity during operation. The system can also be configured to provide twin-cell field gradient measurement.

The system is supplied with dedicated data logging software to facilitate data capture, storage, and analysis. It is also designed for straightforward integration with industry-standard digital video recording (DVR) systems, allowing synchronized inspection and recording workflows.

The system is engineered for robustness and ease of use in demanding environments and includes a field spares and calibration kit to support ongoing maintenance and operational readiness.



Key Features

- Comprehensive kit inc. Calibration components and consumables
- Simple and intuitive display and logging software
- Bespoke acquisition electronics with low noise and high accuracy
- Versatile kit suits work class and observation class ROVs
- Simple power and communications interface with ROV
- 6000m Rating
- Drop cell reference included



Key Benefits

- Most robust system currently on market
- Low maintenance / operating cost – high durability Inconel probe tips & housing
- Versatile operation from small & large ROVs - Reduced size and weight
- Accuracy & reliability - Twin half-cell probe for live verification
- Low maintenance - Enhanced lifespan of Ag/AgCl elements

Standard Kit Contains

- STR Sentinel CP ROV Interface Bottle (CP-UC-6000-48)
- STR Sentinel CP Proximity & Contact Probe – C/W 1x Inconel Tip, 2x Ag/AgCl reference element & 2 m MCIL3F cable assembly
- 3 m MCIL3M to MCIL3F Probe extension cable assembly
- ROV manipulator mount c/w fish tail
- ROV Mounting Lance
- Field Gradient Extension Module
- STR Drop Cell Reference C/W 70 m Cable on hand reel, MCIL2F, removable weight & 1x Ag/AgCl reference element
- 10 m cable assembly C/W MCIL2F for STR Drop Cell
- Calibration Kit Comprising –STR Saturated Ag/AgCl reference electrodes, calibrated multimeter, 20L calibration bath, sodium chloride, zinc calibration anode.
- Spare Front End-Cap and Tip Holder Assembly for STR Sentinel CP Probe
- Spare Ag/AgCl Reference Elements
- Spare Inconel Contact Tips
- Spare connectors & cable accessories

TECHNICAL SPECIFICATIONS

PROPERTIES	DESCRIPTION
STR Sentinel CP Probe ROV Interface CP-UC-6000-48	
Input Supply Voltage	24 & 48VDC (19-54VDC)
Input Supply Power	2W Typical
Depth Rating	6000 m operational
Operating Temperature	0°C to 45°C
Housing Material	Titanium Grade 5
Connectors	Industry standard MCBH connectors
Weight	1.58Kg in air / 0.75Kg in water
Dimensions	207 mm x 72 Dia
Protection	Self resetting reverse polarity input protection, over/under voltage protection, opto-isolated comms
Communications	• ASCII Serial Data Output. • Logging & Display via STR Sentinel Logger Software. • Serial data KP input. Serial output to DVR
Features	• High impedance inputs to extend Ag/AgCl element operational life • Integrated electrical noise filters • Auto-calibrating data acquisition system

PROPERTIES	DESCRIPTION
STR Sentinel CP Proximity & Contact Probe	
Features	Integrated slim line 3 axis shock mounting Reinforced nose cone area Field replaceable reference elements
Contact Tip	STR 35 mm Inconel probe tip
Reference Elements	2x STR Ag/AgCl element, field Replaceable
Housing Material	Black Acetal Plastic
Connector	MCIL3F / MCDLSF
Weight	3.2kg in air / 1.9kg in water (inc mount & Fishtail) 2.0kg in air / 0.9kg in water (Standalone Probe) 0.3kg (field Gradient Extension)
Dimensions	615mm L x 57mm Dia. (inc mount & Fishtail) 311mm L x 57mm Dia (Standalone Probe) 107mm L x 57mm Dia (field Gradient Extension)
STR Sentinel Drop Cell	
Features	Removable drop weight to aid ROV use field replaceable reference element 70 m cable supplied for remote reference 10 m cable supplied for ROV use durable & low-drag umbilical
Reference Element	1x STR Ag/AgCl elements, field replaceable
Housing Material	Black Acetal Plastic
Connector	MCIL2F / MCDLSF
Weight	1 kg in air / 0.65 kg in water (inc weight) 0.15 kg in air / 0kg in water (without weight)
Dimensions	335 mm L x 54 mm Dia. (inc weight) 222 mm L x 33 mm Dia (without weight)

