
WAY AHEAD IN CORROSION CONTROL

POLATRAK®

PRODUCT CATALOGUE



polatrak.com



Polatrak® probes are designed with dual reference electrodes for accuracy and interchangeable spare parts for service in the field. Unlike other cathodic-protection testing equipment, all Polatrak probes are designed with dual elements. Silver chloride electrodes provide the greatest accuracy offshore, but they can also require frequent re-calibration.

Dual elements allow the technician to constantly monitor calibration during the survey. If one electrode begins to drift, the survey can continue by calibrating with the second electrode. All of the internal electrodes and other components in the ROV-II™ and CP Gun™ are replaceable and easily changed during routine maintenance. Our probes are available for every type of offshore survey: Topsiside drop-cell, diver-held contact and proximity, and ROV contact and proximity.

Electrode elements*

All Polatrak® probes have two electrode elements, and the CP Gun™ and ROV-II™ feature two types of removeable elements that are interchangeable to suit specific water environments.

Ag/AgCl (Silver/Silver Chloride)

Material	Ag/AgCl with silver wire core
Dimensions	Ø 8 mm x 45 mm [Ø 0.3" x 1.8"]
Accuracy	± 5 mV
Applications	Seawater

Cu/CuSO₄ (Copper/Copper Sulphate)

Material	Cu/CuSO ₄ with copper wire core
Dimensions	Ø 8 mm x 36 mm [Ø 0.3" x 1.4"]
Accuracy	± 5 mV
Applications	Fresh water / slightly brackish water

*Ag/AgCl elements are provided as standard

TOP SIDE

Applications

- Platforms
- Risers
- Wind turbines
- Floating production

The standard model, shown above, has 75 m (250 ft) of cable. The DC II is available with extra-long cable up to 450 m (1,500 ft) and a high-capacity reel, shown below.



DC II™ DROP CELL

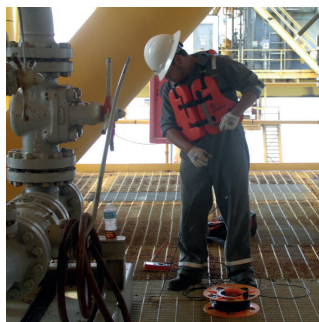
The Polatrak® DC-II is the first and only twin-element portable reference electrode of its kind. The twin elements provide on-board calibration, which reduces the chances of topside survey inaccuracies.

The standard DC-II comes with 75 m (250 ft) of cable and can be ordered with custom lengths up to 450 m (1,500 ft) on a high-capacity cable reel, making it ideal for any topside cathodic-protection survey.

The Polatrak® DC-II is used to survey more offshore structures worldwide than any other portable drop-cell-style cathodic protection probe. It has been specified by a large number of operators as the only acceptable choice of equipment.

Parts list

DC20003	DC-II with 75 m reel
DC20004	DC-II with 450 m reel



Specifications

Depth rating	450 m [1,500 ft]
Operating temp.	1°C to 40°C
Elements	2 x Ag/AgCl ±5mV (sealed)

Overall weights & dimensions

DC-II drop cell

Dimensions	89 x 240 x 420 mm
(W x H x L)	[3.5" x 9.5" x 16.5"]
Weight (Air)	2.9 kg [2.4 lb]

DC-II 500-ft reel

Dimensions	355 x 560 x 230 mm
(W x H x D)	[15" x 22" x 9"]
Packed weight	10 kg [22 lb]



SUBSEA



CP Gun™ kit with case and spares



Specifications

Depth rating	300 m [1000 ft]
Operating temp.	1°C to 40°C [34°F to 104°F]
Voltage range	0 mV to -1999 mV
Input resistance	1 M-Ohm
Power supply	2 No. 9V PP3 alkaline batteries (disposable)
Material	Black acetal
Dimensions (W x H x L)	89 x 240 x 420 mm [3.5" x 9.5" x 16.5"]
Weight (air)	2.9 kg [6.5 lbs]
Weight (water)	0.7 kg [1.5 lbs]

Offshore storm case

Dimensions (W x H x L)	355 x 560 x 230 mm [14" x 22" x 9"]
Packed weight	9.5 kg [21 lb]

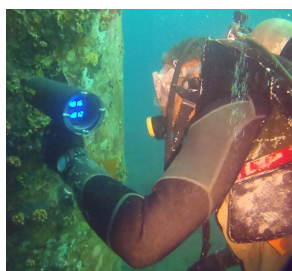


Ultra-bright LED displays

CP GUN™

The CP Gun™ is the most user-friendly diver-held cathodic protection probe on the market, outperforming all other available bathyconrometer-type devices in both accuracy and convenience. An on-off switch for longer battery life, interchangeable freshwater / seawater electrodes and ultra-bright LED displays for limited visibility conditions make the CP Gun™ the best choice for divers conducting surveys.

The dual-electrode elements and readouts providing self-calibration capabilities make it the most accurate unit offered, and its rugged, modular design allows repairs to be done in the field.



Replacement /spare parts list

Part no.	Description
CPG0001	CP-Gun kit with case and spares
ROV0004	Contact tip
ROV0016	Nose cone assembly
MLT0004	Silver/silver chloride reference element
CPG0006	Copper/copper sulphate reference element
MLT0011	Pressure housing
MLT0010	LED readout unit
MPT0001	CP Gun on/off switch
MLT0014	Readout lens
GSK0009	Lens O-ring
GSK0008	Lens backup O-ring
FAS0104	Lens retaining screws
MFR0015	Lens cover
352-MN01-ENG	Instruction manual
GSK0006	Tube O-ring lubricant
EOR0015	Tube silicone grease insulating compound
ROV0018	Zinc calibration coupon
CALL	Transit case

ROV-II™



T-handle mount for work class ROV
6" W X 5" H (including U-bolts) X 21" L

The ROV-II is the most dependable and widely-used general-purpose, tip-contact cathodic-protection probe on the market. The ROV-II™ probe is designed with ROV use in mind, but can also be integrated to a diver's umbilical as a combination proximity and contact probe.

Depending on the type of cathodic protection survey required, the ROV-II™ can be used as a stabbing tip-contact probe or as a proximity electrode by using a surface ground wire (usually accessed through the diver's umbilical).

Specifications

Dimensions (W x H x D)	57 x 57 x 292 mm [2.25" x 2.25" x 11.5"]
Depth rating	3000 m [10,000 ft]
Operating temp.	1°C to 40°C [34°F to 104°F]
Voltage range	0 mV to -1999 mV
Material	Black acetal
Weight (air)	2.9 kg [6.5 lb]
Weight (water)	0.7 kg [1.5 lb]
Packed weight	3.2 kg [7 lb]



Reference element



Contact tips

Replacement /spare parts list

Part no.	Description
ROV0008	ROV-II kit with case and spares
ROV0004	Contact tip
ROV0016	Nose cone assembly
MLT0004	Silver/silver chloride reference element
CPG0006	Copper/copper sulphate reference element
MLT0011	Pressure housing
352-MN01-ENG	Instruction manual
GSK0006	Tube O-ring lubricant
EOR0015	Tube silicone grease insulating compound
ROV0018	Zinc calibration coupon
CALL	Transit case

EFG™ PROBE



Specifications

Depth rating	3,000 m
Operating temp.	1°C to 40°C [34°F to 104°F]
Voltage range	0 mV to -1999 mV
Material	Black acetal
Dimensions (W x H x L)	57 x 57 x 432 mm [2.25" x 2.25" x 17"]
Weight (air)	2.9 kg [6.5 lbs]
Weight (water)	0.7 kg [1.5 lbs]

Offshore storm case

Dimensions (W x H x L)	Ø115 x 525 mm [Ø 4.5" x 20.75"]
Packed weight	3.6 kg [8 lb]

Replacement /spare parts

Part no.	Description
ROV0022	EFG probe
DCM0043	Tail assembly
DCM0045	Nose
DCM0053	EFG upgrade kit
UWC0047	EFG flying lead
DCM0035	EFG cradle, full
DCM0036	EFG cradle, half
DCM0053	EFG upgrade kit
DCM0027	Isolation plate
DCM0032	Isolation washer
DCM0041	Isolated T-Handle
UWC0077	Rugged EFG whip 13'

The EFG™ provides a contactless method of determining anode activity and of measuring electric fields in seawater. When passing near a structure such as a pipeline, the

current density reading can confirm that an anode is properly activated. It's intended for use with the Deep C Meter 3000AD™ ROV survey system shown on page 6.

ROV SYSTEMS



DEEP C METER 3000AD™

The Deep C Meter 3000 AD™ is the premier ROV cathodic-protection survey system for use in deep water. It is designed for rugged service on a work-class ROV at water depths up to 3000 meters (10,000 feet). The unit can integrate fully with ROV systems for power and RS-232 serial data transfer. The ROV-II™ contact probe (included) is mounted on a convenient, shock-absorbing T-handle. In addition to the digital data stream, the always-on display allows survey teams to operate even when serial communications are not available. The display brightness can be remotely adjusted in real-time to accommodate a variety of lighting and camera conditions.

The optional electric field gradient (EFG) probe enables any AD series meter to detect electric currents in seawater, allowing touchless measurement of anode activity.

Accurate video and digital output

The Deep C Meter 3000 AD™ provides real-time data through three LED

displays and a continuous RS232 (standard ASCII string) digital feed. The included Survey™ software makes planning, executing and reporting a CP survey much more reliable, convenient and precise than ever before. Having a visual backup of the data provides more confidence during the survey and an easy way to double-check your results when you return to shore.

Works with ROV power

The Deep C Meter 3000 AD™ is 24V DC ROV powered, which eliminates the need to open the pressure housing to change batteries and replace O-rings. Cabling can be interfaced with the ROV either through a splice or oil-filled cables.

Stand-alone version available

We also offer the Deep-C-Meter 3000™ unit, which is a battery powered version that does not interface at all with ROV systems. All readings are taken from the subsea readout via the ROV camera. Upgrade kits for these non-AD units are also available.

Specifications

Depth rating	3000 m [10,000 ft]
Operating temp.	1°C to 55°C [34°F to 131°F]
Voltage range	+2499 mV to -2499 mV
Input resistance	1 G-Ohm
Power supply	24VDC nominal (9-36VDC)
Communication protocol	RS 232
Data type	Continuous ASCII stream with delimiters 2 data sets per second
Precision	24 bit analogue digital converter
Dimensions (Ø x L)	89 x 178 mm [Ø 3.5" x 7"]
Weight (Air)	4 kg [9 lb] [34°F to 131°F]
Weight (Water)	3.6 kg [8 lb]
Packed weight of kit in offshore travel case	9.5 kg [8 lb]
Pressure housing material	316 stainless steel

Replacement /spare parts

DCM0003-3000	Pressure housing
DCM0001	Articulating mount
MLT0014	Lens
GSK0009	Lens - O ring
GSK0008	Lens - backup ring
FAS0104	Lens retaining screw
MFR0015	Lens cover
UWC0038	Power bulkhead dummy plug (f)
UWC0044	EFG bulkhead dummy plug (m)
UWC0045	ROV II bulkhead dummy plug (f)
UWC0041	ROV II flying lead
UWC0049	Power cable whip
UWC0061	EFG flying lead
Call	EFG probe
ROV0016	ROV II probe nose cone
ROV0004	Contact tip
MLT0045	Silver / silver chloride element
Call	Voltmeter module
ROV0014	T-Handle for work-class ROV
GSK0006	Tube O-ring lubricant
EOR0015	Tube connector sealant
ROV0018	Zinc calibration block
DCM0053	EFG upgrade kit
DCM0057	Bottle upgrade
358-MN03-ENG	Instruction manual
Call	Protective case

REMOTE ELECTRODE KIT (REK)

The Polatrak® Remote Electrode Kit™ upgrades the Deep C Meter™ with EFG and ROV-II to perform “remote electrode” pipeline surveys (also known as “three electrode”, “remote variance”, “gradient” or “close interval” survey).

This kit is compatible with any AD (analog to digital) series Deep C Meter™ and requires at least one copper signal wire from the remotely operated vehicle (ROV) to either the tether management system (TMS) or the survey vessel. With the remote electrode kit installed, the polarity of the first display line is reversed and the second display will now report the remote potential variance while traversing the pipeline.

What's in the kit

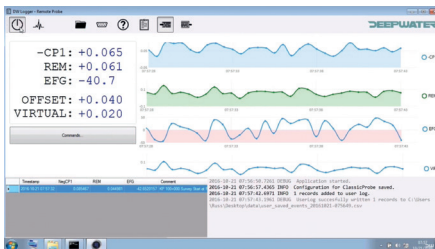
The remote electrode kit comes in a rugged, offshore storm case with all of the components and instructions to configure the Deep C Meter™ for remote survey activities.



Parts list

DCM-0071 Remote electrode kit

SURVEY™ SOFTWARE



Survey is designed to make cathodic protection surveys quick and easy. It comes free with every Deep C Meter™ 3000AD purchased. The software can work in multiple three modes, to support any survey requirements:

Traditional stab + EFG – The ROV take stabs and EFG readings, but no remote electrode readings.

Remote electrode – → Remote electrode - The ROV takes stabs and EFG

readings. In between stabs the ROV also takes remote variance measurements with a remote electrode deployed over the side of the vessel or attached to the ROV's TMS.

Swain™ meter mode – for use with the underwater clamp-on ammeter.

Features include:

Import telemetry data: Import ANY data-stream to be recorded in the software alongside the CP readings (telemetry, etc.)

Remote variance: Virtual potential in real-time (last calibration + remote variance), just like other survey systems (NOTE: this reading is not an actual CP potential)

Time machine module: Allows the user to select any data point from the last 30 seconds (data sampling rate: 2 per second). No more clumsy button pushing at the moment of stab.

Pre-load survey: Pre-loaded event comments allows you to enter stab locations and survey points customized to your assets ahead of time. Just tick them off as you survey.

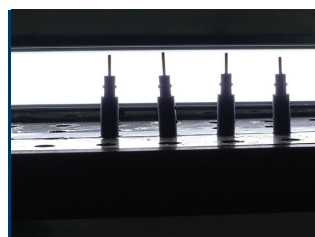
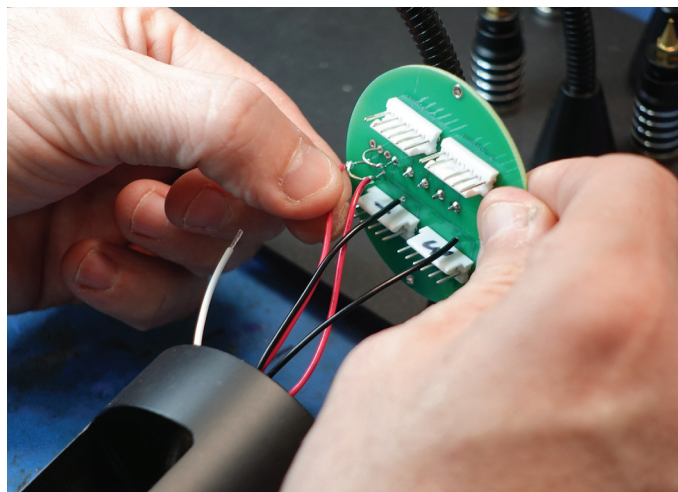
Logs continuously: 100% logging all the time (while the software is on, data is being recorded) – no chance for user error.

CSV Output: A quick .csv output of event log (stabs, spot readings) allows for stab surveys to be completed on the boat.

REPAIR AND CALIBRATION SERVICES

Complete repair and calibration services are available for Polatrak® products via each of our worldwide office locations. By design, spare parts can be purchased and Polatrak® probes can be repaired in the field during projects if necessary, but we also offer comprehensive repair and maintenance services through our sales and manufacturing facilities.

Our technicians can inspect, troubleshoot, repair and recalibrate your well-worn probes and readouts after each dive season and have them working as new for your upcoming projects. Fresh contact tips, batteries, electrodes and factory calibration will help ensure a trouble-free start to your next season.



HOW TO ORDER

Polatrak® products are manufactured at Deepwater's headquarters in Houston and can be ordered by emailing us at sales@stoprust.com and through any of our offices worldwide:

● United States

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