

Technical datasheet

Polatrak Deep C Meter™ 3000 AD

General

The Polatrak Deep-C-Meter 3000 AD is designed for rugged service on a work-or-inspection class ROV. The unit is ROV powered and provides continuous visual and digital output. Rated for operation in up to 10,000 feet (3000 m) depth, this system can be used for any inspection. The instrument readout unit can be conveniently mounted anywhere on the ROV, and the probe unit is held in the tee-handle manipulator mount. The Deep C Meter kit includes an ROV II probe, an articulated mount, standard whips and all standard replacement parts.

Specifications

Depth rating	10,000 ft [3000 m]
Operating temp.	1°C to 55°C
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

Electrode elements*

ROV-II has two electrode elements which are interchangeable to suit specific water environments

Ag/AgCl (Silver/silver chloride)

Material	Ag/AgCl with Silver Wire Core
Dimensions	Ø 0.3" x 1.8" [Ø 8 mm x 45 mm]
Accuracy	± 5 mV
Applications	Seawater

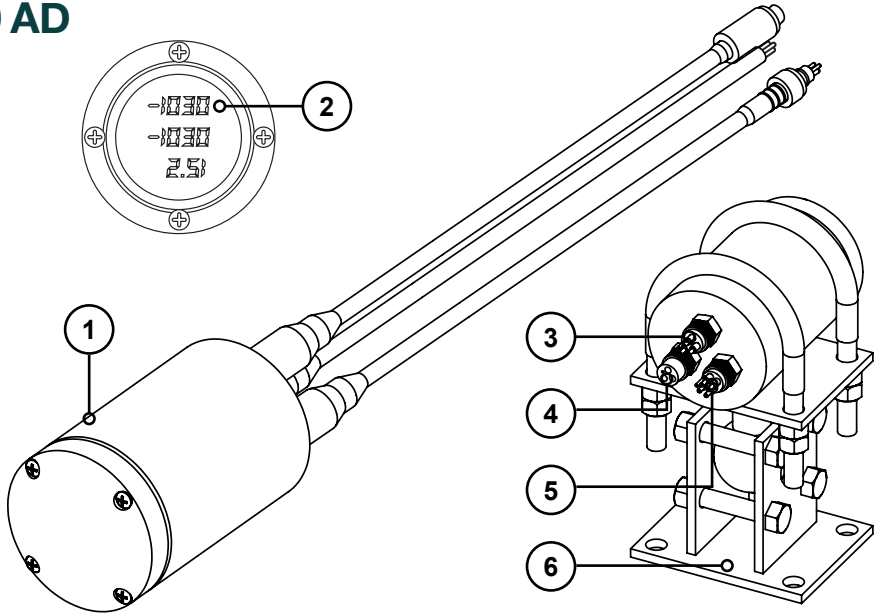
Cu/CuSO4 (Copper/copper sulphate)

Material	Cu/CuSO4 with copper wire core
Dimensions	Ø 0.3" x 1.4" [Ø 8 mm x 36 mm]
Accuracy	± 5 mV
Applications	Fresh water / Slightly brackish water

*Ag/AgCl elements provided as standard

Standard kit components

Offshore storm case, Deep C Meter 300 AD, ROV-II probe, Zn calibration coupon, spare electrode, tips and o-rings. Additional spares and replacements are available upon request.



Overall weights & dimensions

Deep C Meter 3000 AD

Dimensions (Ø x L)	Ø 3.5" x 7" [89 x 178 mm]
Weight (Air)	9 lb [4 kg]
Weight (Water)	8 lb [3.6 kg]

Main body

Pressure housing (Item 1)

Material	316 stainless steel
Internal components	LED readouts

Lens assembly (Item 2)

Material	Clear acrylic
Dimensions	Ø 3.5" x 0.9" [Ø 89 mm x 23 mm]
Seal	2 No. O-rings, 1 No. B/U ring
Attachment	4 No. SS316 retaining screws
Display	3 No. 4 digit 0.4" [10 mm] ultra bright blue LED display with variable brightness

Meter mount (Item 6)

Material	316 SS
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Offshore transit case

Dimensions (W x H x D)	25" x 20" x 12" [635 x 508 x 305 mm]
Packed weight	45 lb [9.5 kg]

ROV-II interface (Item 3)

Pin 1	Contact tip
Pin 3	Electrode #2
Pin 2	Electrode #1

EFG probe interface (Item 4)

Pin 1	Unused
Pin 3	Electrode #2
Pin 2	Electrode #1

Power and data interface (Item 5)

Power bulkhead	Micro WET CON MCBH 4M
Pin 1	+24VDC
Pin 2	Ground
Pin 3	RX (RS 232)
Pin 4	TX (RS 232)

ROV-II contact tip (Item 7)

Material	Stainless Steel 316 pointed tip
Dimensions	60° point, 0.75" [19 mm] long, 0.38" [10 mm] A/F
Features	Fully replaceable

