# **CEEDUCER PRO**<sup>™</sup>

The portable solution for shallow water hydrographic surveys

#### Compact

The CEEDUCER PRO<sup>™</sup> is a compact fully functional hydrographic survey system, with built in GPS, data logging, a dual channel echosounder and a rechargeable battery. This allows for fast acquisition of bathymetric survey data with minimum fuss.

#### Rugged

Housed in a rugged Pelican case the CEEDUCER PRO<sup>™</sup> is capable of fast deployment in vessels of opportunity and has been designed to be simple to use in the field without impacting data quality.

#### Dependable

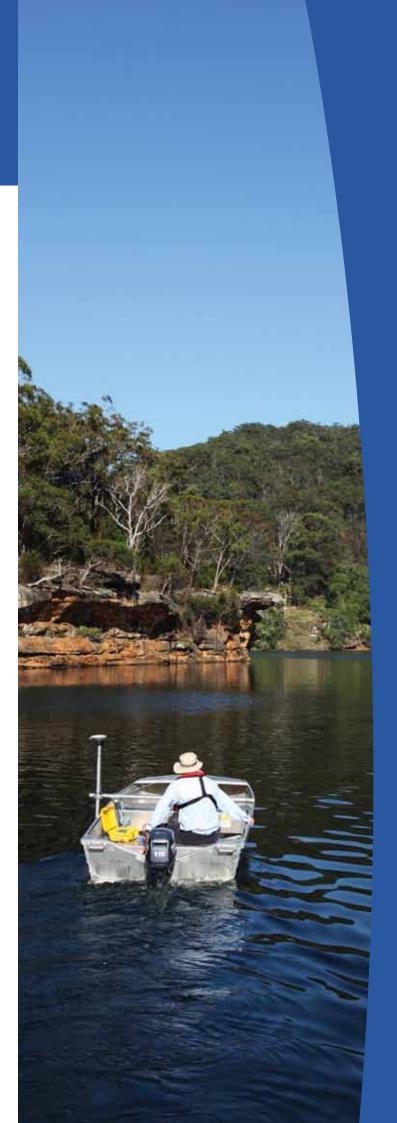
The CEEDUCER PRO<sup>™</sup> is currently in use worldwide by defence departments, port & harbour authorities, educational institutes and environmental agencies. It is used in applications ranging from dredging and engineering surveys to beach profiling for environmental studies.

### Expandable

The CEEDUCER PRO<sup>™</sup> has the ability to accept various external inputs, including: the user's own GPS, RTCM, tide, heave and deep water echosounders. This can extend the CEEDUCER PRO<sup>™</sup> survey capabilities.



www.ceehydrosystems.com



# **CEEDUCER PRO**<sup>™</sup>

### **General Specifications**

Physical	
Dimensions	30.0 x 25.0 x 13.8 cm (L x W x D)
	11.81" x 9.84" x 5.43"
Display	320 x 240 backlit graphic LCD with contrast control
Weight	3.7 kg (8.2 lbs)
Colour	Pelican Yellow
Connectors	LEMO 1B & 2B series, Industrial RJ45, TNC
Environmental	
Operating temperature	0°C-50°C (32°F-122°F)
Humidity	95% non condensing
Ingress protection rating	IP67
Power	
Power consumption	7.2 watts (approx operating time 8 hours) – Crescent
Internal battery	Rechargeable high capacity NiMH battery 10Ah
Antenna voltage output	5.0 VDC
External power supply	Nominal 12.0 VDC @ 2A (9-24 VDC range)
GPS Receiver Options	
Hemisphere Crescent L1 (Std)	± 0.6m (95% DGPS)
Hemisphere Eclipse L1/L2 (Opt)	± 0.2m (95% OmniSTAR HP)
Hemisphere Eclipse L1/L2 (Opt)	± 0.02m (95% RTK)
Timing Output	1 PPS (Pulse Per Second)
IALA Beacon Receiver	
Hemisphere SBX-4(Std)	2 channel, parallel tracking
(Crescent GPS receiver only)	Frequency range 283.5-325.0 kHz
	Channel spacing 500 kHz
Echosounder	
Depth range	200 kHz 0.3-99.9 m
	30 kHz 0.75-99.9 m
Maximum ping rate	6 Hertz
Accuracy	1 cm $\pm$ 0.1% of depth
Resolution	1 cm
Transducer Options	
Standard 200 kHz	200 kHz, 8° beam width @-3dB
Narrow Beam 200 kHz	200 kHz, 2.7° beam width @-3dB
Dual 200/30 kHz	200/30 kHz, 8°/19° beam width @-3dB
External Data Interfaces	
GPS input	NMEA 0183
RTCM input	RTCM v2.3 (DGPS) Crescent & Eclipse
	RTCM v3, ROX, CMR+ (RTK) Eclipse
Heave input	TSS 1
Tide input	CEETIDE
Echosounder	ODOM, NMEA 0183
Baud rate	4800 – 115200
Data hita/navity/atan hita	0/N1/4



- Specifications are subject to change

Data bits/parity/stop bits

- Visit www.ceehydrosystems.com for the complete list of specifications

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