

The portable solution for shallow water hydrographic surveys



COMPACT

The CEEDUCER PRO is a compact fully functional hydrographic survey system, comprising the necessary components for fast acquisition of bathymetric survey data with the minimum of fuss.

RUGGED

Housed in a rugged Pelican case the CEEDUCER PRO has in built GPS, IALA Beacon receiver, Data logging and dual channel echo sounder (200/30 kHz). The CEEDUCER PRO is capable of fast deployments in vessels of opportunity and has been designed to be simple to use in the field without compromising the quality of the data collection.

DEPENDABLE

The CEEDUCER PRO is currently in use world wide by defence departments, ports & harbours, educational institutes & environmental agencies. It is used in applications ranging from dredging and engineering surveys to beach profiling for environmental studies.

EXPANDABLE

The CEEDUCER PRO has the ability to accept various external inputs, such as the user's own GPS, RTCM, Tide, Heave & Echo sounders. This can extend the CEEDUCER PRO capabilities from shallow water operations to water depths deeper than 100 m.

GENERAL SPECIFICATIONS

Physical

Dimensions	- 27cm x 24cm x 12cm
Display	- 320 x 240 Backlit Graphic LCD with Contrast
Weight	- 3.7 Kg
Colour	- Pelican Yellow, (Black available on request)
Connectors	- LEMO 0B, 1B & 2B series, Industrial RJ45, TNC

Environmental

Temperature	- 0°C to 50°C
Humidity	- 95 % non condensing
Ingress Protection Rating	- IP67

GPS options

Ashtech DG14	- ± 0.5 m (95 % DGPS)
Hemisphere Crescent (Std)	- ± 0.6 m (95 % DGPS)

IALA Beacon Receiver

Hemisphere SBX-4(Std)	- 2 channel parallel tracking
	- Freq range 283.5 to 325. 0 kHz
	- Channel spacing 500 kHz

External Data Interfaces

GPS Input	- NMEA 0183
Baud rate	- 4800 - 115200
Data bits/parity/stop bits	- 8/N/1
GPS message	- GGA + VTG

Heave Input	- TSS
Baud rate	- 4800 - 115200
Data bits/parity/stop bits	- 8/N/1
Heave message	- TSS 33

User Controls

Date/Time	- Set Date & Time
Output Formats	- Ceestar basic, Odom dual, Deso, GPS + Depth
Sound Velocity	- Auto (Salt/Brackish/ Fresh) or Manual User input
Echo sounder Draft	- Independent draft settings per frequency
Echo sounder Gate	- Set Min & Max depth for bar check
Geodetic Setup	- User defined Geodetic shift
Ext Heave Input	- Select or disable, Baud rate,
Ext GPS / Tide input	- Select or disable, Baud rate
Ext echo sounder	- Select or disable, Baud rate
Diff Options	- Select SBAS, Beacon or Local RTCM

Echo sounder

Depth Range	- 200 kHz 0.3 to 99.9 m
	- 30 kHz 0.75 to 99.9 m
Maximum ping rate	- 6 Hertz
Accuracy	- 0.02% of depth or 1cm whichever is greater
Resolution	- 1 cm

Transducer Options

Standard 200kHz (Std)	- 200 kHz, 8 degree beam width @-3dB
Narrow Beam 200kHz	- 200 kHz, 2.7 degree beam width @-3dB
Dual 200/30kHz	- 200/30 kHz , 8/19 degree beam width @-3dB

Power

Power Consumption	- 6 watts
Internal Battery	- Rechargeable NiMH battery 9AH
External Power Supply Voltage	- nominal 12VDC



BORDAR MABNA CO, Sa
WWW.BORDARMABNA.COM
88664810