

CEESCOPE™

The next generation of 'All in One' complete portable survey solutions

Compact

This 'All in One' compact unit features integrated RTK GNSS positioning, a dual channel echo sounder, with full water column recording, internal data logging and a rechargeable NiMH battery.

Rugged

Encased in a virtually indestructible Pelican case the CEESCOPE™ has been designed and manufactured using high quality components to withstand harsh environments.

It can be easily deployed on small opportunistic platforms, including: kayaks, canoes, personal water crafts (jet ski) and other small vessels.

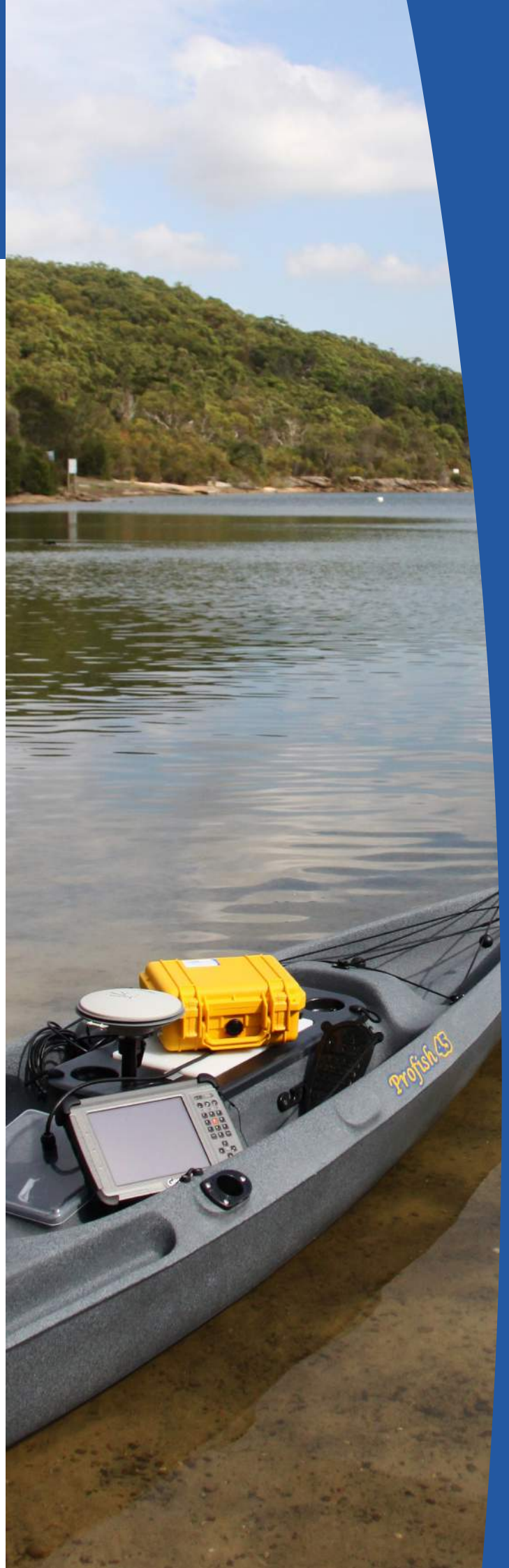
CEESCOPE™ Advanced features

The echo sounder operates in automatic or manual mode and is capable of recording a high resolution (3200 spp) full water column acoustic envelope. This results in extremely detailed acoustic data for accurate post processing analysis.

Integrated with the latest GNSS receivers the unit utilises all known GNSS signals, this makes the unit a future proof investment.

Wireless connectivity makes it easy to link with external hardware, including: Tablet PC, PDA and Notebook PC.

A removable waterproof USB memory stick connects to the unit making it simple to log real time data and then transfer logged survey data to a PC. All data is internally PPS time stamped.



CEESCOPE™

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	420 x 272 touch screen colour LCD
Weight	3.65 kg (8.05 lbs)
Connectors	LEMO 1K & 2K series, Industrial RJ45

Environmental

Operating temperature	-5°C – 50°C (23°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 (9-26 VDC range)

GNSS Receiver Options

Hemisphere Crescent L1 + MRB	± 0.6m (95% DGPS) GPS
Novatel OEMStar	± 0.5m (95% DGPS) GPS + GLONASS
Novatel OEM628 L1/L2	± 0.4m (95% DGPS) GPS + GLONASS
Novatel OEM628 L1/L2 RTK	± 0.01m (95% RTK) GPS + GLONASS

Wireless Connectivity

Bluetooth Internal antenna	0 – 50 m range*
Wi-Fi	0 – 50 m range*
Internal UHF modem	403 – 473 MHz (RTK only)

Echo Sounder

Mode	Automatic or Manual
Depth range**	0.2 – 200 m (0.6 – 650 ft) @ 200 kHz 0.75 – 200 m (2.5 – 650 ft) @ 33 kHz
Ping rate	1 – 20 Hertz, depth dependent
Pulse length	HF (1 – 30 cycles), LF (1 – 20 cycles)
TVG	None, LOG 10, LOG 20
Manual gain	30 – 100%
Acoustic Velocity Range	1350 – 1750m (4,429 – 5,741 ft)
Draft	0 – 10 m (1 cm increments)
Accuracy	1 cm ± 0.1% of depth
Resolution	1 cm

Transducer Options

Standard 200 kHz	200 kHz, 9° beam width @ -3dB
Narrow Beam 200 kHz	200 kHz, 3° beam width @ -3dB
Dual 200/33 kHz	200/33 kHz, 8°/19° beam width @ -3dB

External Data Interfaces

GPS input	NMEA 0183
RTCM input	RTCM v2.3 (DGPS) Crescent RTCM v3.0, CMR+ (RTK), OEM628
Heave input	TSS 1
Tide input	CEETIDE

* line of sight

** series dependent

- specifications are subject to change

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

- v15124

Horizontal position accuracy (RMS)

