

SINGLE-BEAM ECHO SOUNDER FOR BATHYMETRIC SURVEY

The CHCNAV D270 is a portable single beam echo sounder. Its water temperature sensors allow real-time correction of sound velocity based on water temperature, resulting in even more accurate water depth measurement. The echo sounder can be used for river section measurement, reservoir capacity measurement and dredging volume measurement of waterways. The two frequencies of 200 KHz and 25 KHz can be switched according to the water quality, in order to optimize accuracy and adapt to the measurement environment. The D270 features an easy and intuitive configuration and map display web page through a simple connection to a smartphone.



SPECIFICATIONS

Measurement Parameters	
Frequency	200 kHz / 25 kHz
Beam Width	$6.5^\circ \pm 1^\circ$ (200 kHz) $28^\circ \pm 1^\circ$ (25 kHz)
Depth Range	0.15 m to 300 m
Resolution	0.01 m
Accuracy	$\pm 0.01 \text{ m} + 0.1\% \times D$ (D = water depth)
Maximum sample rate	30 Hz
Sound velocity adjustment range	1300 m/s to 1700 m/s
Electrical	

Maximum transmit power	300 W
Power consumption	10 W
External power	10-36 V DC / 100-240 V AC
Communication	
Operating system	Linux
Web page	Support PC/Mobile web pages
Ports	RS232 / Network port / Transducer port
WiFi	802.11 n - 2.4 G
Bluetooth	BT5.0, compatible with BT2.X
Data format	CHCNAV, NAME SDDPT/SDDBT, Original waveform
Storage	8 GB, support host to store water depth data
Voice prompt	Support shallow water tips
Water temperature sensor	-55°C~+125°C, correct in real time
Physical	
Size (L x W x H)	25.7 cm × 12 cm × 6.4 cm (transducer)
Weight	0.84 kg (host) 2.15 kg (transducer)
Environmental	Operating temperature: -20°C~+60°C (-4°F~+140°F) Storage temperature: -40°C~+70°C (-40°F~+158°F)
IP Rating	IP67
Material	Aluminum Alloy