

# SUPPLY OF FIVE NUMBERS OF COMPACT ECHO SOUNDERS WITH BUILT-IN TILT SENSOR

## 1. The Scope of the supply

Supply of the Five numbers of compact echo sounder with built-in tilt sensor along with suitable accessories.

## 2. Requirements

The Echo sounders are required to measure water depth at the navigational paths of the ports.

## 3. Technical Specification

Sl.no	Parameter	Description/Range	Compliance
			Yes/No
1	Type of the Echo sounder	Compact single Frequency echo sounder	
2	Quantity	5 no's	
3	Operating frequency	< 500 KHz	
4	Beam angle	< 30°	
5	Measuring distance	0.5 m to 100 m	
6	Sampling Rate (max)	10 kHz	
7	Tilt Sensor (within altimeter housing)	a. Built-in dual axis -Tilt Sensor (external Tilt sensor will not be accepted)	
		b. Roll & Pitch ±90°	
9	Data Interface	RS-232 (External protocol converters will not be accepted)	
10	Baud rate	9600 to 115200 Bps	
11	Data Output Format	a. NMEA0183	
		b. Profile 12bit / 10bit ASCII Text/ Binary	
12	Subsea connector & Cable length	SEACON connector terminated with 10-meter subsea cable	
13	Configuration and Data reading	a. OEM software tool/ Any Terminal	
		b. Hypack / Teledyne PDS	
14	Operating voltage	24V VDC	
15	Auxiliary power	< 5W	
16	Weight	< 1000 gram in air (without cable)	
17	Housing	Suitable for 20m depth of seawater	
18	Operating temperature	Up to 50 deg	
19	Protection rating	IP-68	
20	Accessories	316L Mounting brackets, Fasteners, Aux cable/s, Configuration software/Driver if any,	
21	Certificate	OEM Test/ Calibration certificate	
22	Warranty	1 Year	

23	Manuals, Technical literature	Manual / Installation manual copies with complete technical details.	
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**4. Eligibility**

The bidder must have a strong presence in the Indian market at least for past five years and should have supplied similar type of equipment to a govt agency.

**5. General**

Items to be supplied along with calibration/test certificate.

**6. Specification test**

Specification of all items to be ensured by IITM before acceptance of the same.

**7. Training**

Hands on training to be provided to get operating knowledge of the items.

**8. Dispatch**

All items should be properly packed along with required accessories in the suitable box and it should be dispatched to NTCPWC, IITM, Chennai-600036

**9. Delivery**

Items should be supplied within 4-6 weeks from the date of receipt of purchase order.

**10. Validity**

The offer should be valid for 90 days.