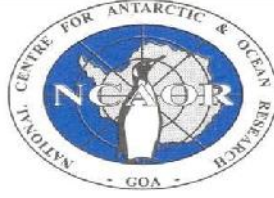


राष्ट्रीय अंटार्कटिक एवं
समुद्री अनुसंधान केन्द्र
पृथ्वी विज्ञान मंत्रालय
भारत सरकार)
हेड लैण्ड सडा, वास्को डा गामा
गोवा- ४०३ ८०४ भारत



NATIONAL CENTRE FOR
ANTARCTIC & OCEAN RESEARCH

Ministry of Earth Sciences
Government of India)
Headland Sada, Vasco da Gama
Goa - 403 804 - INDIA

Tel/Fax No.: 0091 0832 2525573

Email:warlu62@ncaor.gov.in

PROCUREMENT SECTION

Foreign Enquiry

Ref. No.:

ARCTIC-80

Date:

24.01.2014

Due Date:

12.02.2014

Dear Sir,

You are requested to send your offer for the following items as per the terms and conditions mentioned below.

SL. NO.	ITEM DESCRIPTION	QTY
1	Nortek Aquadopp300IM Single Point Current Meter (specification in Annexure-1)	1

Your offer should contain the following information:

1. Submit your quotation on F.O.B/C.I.F basis.
2. Delivery Period:
3. Validity of quotation:
4. Quantity/Trade discounts, if any. :
5. Guarantee/Warranty of the product:
6. Taxes applicable (VAT if any):
7. Enclose brochure/leaflet – Specification:
8. **No advance payment** will be made. Payment by irrevocable letter of credit after supply and acceptance of the equipment by NCAOR. The payment will be authorized after submission of a Bank Guarantee for 10% value of the order towards warranty guarantee. The **performance Bank Guarantee** should be furnished within 15 days from the date of placement of order from a reputed bank (scheduled bank in India **or** foreign bank operating in India) valid till 60 days after the warranty period.
9. Overwriting and corrections should be attested properly. The quotation should be complete in all respects and should be duly signed. **Incomplete and unsigned quotation will not be considered at all.**
10. All relevant technical literature pertain to items quoted **with full specifications** (Drawing, if any), information about the products quoted, including brochures if any should accompany the quotation.
11. A list of **reputed clients** to whom the firm has supplied similar items to be furnished along-with the quotation.
12. Quotation should be **valid for a period of 90 days** and the period of delivery required should also be clearly indicated. If the supplier fails to deliver the goods within the time to be agreed upon, for delayed deliveries and for delays in installation (wherever applicable) NCAOR reserves the right to **levy liquidated damages** at the rate of 0.5% per week or part their of upto maximum of 5%.

13. Warranty shall commence from the date of installation and acceptance of the complete equipment supplied under the Purchase Order / Contract. The **warranty period** and the kind of **post-warranty support** should be indicated.
14. Please **specify the Make/Brand** and Name of the Manufacturer with address, country of origin and currency in which rates are quoted.
15. Both **FOB and CIF prices upto Indian port of entry** namely Goa should be indicated. However quotation should contain item-wise prices including total ex-works price and cost of packing forwarding, approx. cost of air-freight charges for delivery up to Goa, India.
16. A technical Committee constituted by the Director will assess the product supplied/installed for their quality and their conformity to the specifications provided by the firm in their quotations. Any item(s) identified by the Committee to be not as per the specifications or are found to be of inferior quality will be rejected, and the bills towards the supply will not be processed for payment till proper replacements are provided.
17. Suppliers should clearly define the mechanisms of **post-warranty** maintenance or support. Supplier should undertake to support the product for a minimum period of 5 years (post-warranty). Post Warranty, AMC charges for a period of 3 years (annual bases) should also be quoted separately in the quotation.
18. Two sets of operational, service/troubleshooting manuals and diagrams to be supplied with Nortek Aquadopp300IM Single Point Current Meter.

Please enclose documentary proof such as latest purchase order copies etc., to substantiate the reasonability of price.

Also confirm that the “the rates quoted by you are reasonable and lowest charged to any of your customer”.

Director, NCAOR reserves the right to reject any quotation received without assigning any reasons.

Yours faithfully

**Executive (Procurement)
For and on behalf of Director, NCAOR**

Annexure-I

Nortek Aquadopp300IM Single Point current Meter

Water Velocity Measurement	
Range	+ 5m/s 23Hz
Accuracy (of measured value \pm 0.5m/s)	1%
Maximum sampling rate (output):	1Hz, 4Hz
Internal Sampling rate:	23 Hz
Measurement Area	
Measurement cell size:	0.75m
Measurement cell position:	0.35-5.0m (user selectable)
Default position (along beam):	0.35-1.85m
Doppler Uncertainty (noise)	
Typical uncertainty for default configurations:	0.5-1.0cm/s
Uncertainty in U.V at 1Hzsampling rate:	1.5cm/s
Echo intensity	
Acoustic frequency:	2MHz
Resolution:	0.45 dB
Dynamic range:	90 dB
Sensors	
Temperature	Thermistor embedded in head
Range	-4 to 40°C
Compass	Magnetometer
Accuracy/Resolution	0.2°/0.1° for tilt <20°
Tilt	Liquid level
Accuracy/resolution	0.2°/0.1°
Maximum Tilt	30°
Up or Down	Automatic Detect
Pressure	Piezoresistive
Range	300m
Accuracy/resolution	0.5%/0.005% of full scale
Analog Inputs	
No. of channels	2
Voltage Supply	Selectable through firmware commands (Battery Voltage/500mA,+5V/250mA,+12V/100mA)
Voltage Input	0-5 V
Resolution	16 bit A/D
Data Communication	
I/O	RS 232, RS 422
Communication Baud Rate	300-115200 (baud)
Recorder down baud rate	600/1200k, baud for RS 232 and RS 422
Software	To be provided with the instrument
Function	Deployment planning, start with alarm, data, retrieval, ASCII conversion, online data collection and graphical display, Test Modes
Data Recording	
Capacity	352 MB for 1 year of operation and self-recording
Data record	40 bytes
Diagnostic record	40 bytes
Power	
DC Input	9-15 VDC
Peak Current	3A at 12 V DC
Power Consumption 1Hz	0.2-1.4 W
Avg. Consumption	0.1W(0.02Hz), 0.01W (0.002Hz)
Sleep mode	0.0013W
Transmit Power	0.3-20W, 3 Adjustable levels
Data Collection(Lithium)	18months at 10min, \pm 1.5cm/s noise
Real Time Clock	

Accuracy	+/- 1min/year
Backup	4 weeks
	Material
Standard	Derlin
	Connectors
Bulk head	MCBH-8FS
Cable	PMCIL-8-MP
	Environmental
Operating Temperature	-5°C to 40°C
Storage temperature	-20°C to 60°C
Shock and Vibration	IEC 721-3-2
Pressure Rating	0-300m
Weight in air	2.3kg
Weight in water	Neutral
IMM Capability	Required for 10mm jacketed wire rope
Deliverables	<ol style="list-style-type: none"> 1) Nortek Aquadopp with IMM and 352 MB Memory 2) Lithium battery for 1 year of operation 3) Communication cables for configuration 4) Alignment Fins and required fixtures 5) Softwares 6) Serial to USB converter