



National Technology Centre for Ports, Waterways & Coasts.
(NTCPWC)
No.606, 6th floor New academic complex
IIT Madras -Chennai -600036.
Phone: 22578917

Ref: No. PROJECT NO.OEC/18-19/160/MOSH/KMUR
Tender ref no. NTCPWC/PVCS /003

DATE: 26.11.2018

Item Description : Differential GPS with suitable accessories -1no (as per specification attached)

Due date : 10.12.2018 at 3.00 P.M.

Dear Sir,

1. Quotations/Tender with compliance sheet are invited in duplicate for the various items shown below/overleaf/**enclosed list**.
2. The quotations are to be in **Single bid system**.
offer to be duly sealed and super scribed with tender reference number and due date and must be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. Fax and Email quotation are not acceptable.
4. Quotations should be valid for 90 days from the due date and period of delivery required, warranty terms etc. should also be clearly indicated. Warranty clause will be as said in the specification.
5. Imported supplies should be quoted **for CIP chennai basis indicating mode of shipment**.
6. Local firms to quote for free delivery to this Institute. If quoted for Ex-Godown delivery charges be indicated separately.
7. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges and collected back at the supplier's expenses. Compliancy certificate is to be provided indicating conformity to the technical specifications
8. Sales Tax/General Taxes/ED if applicable and such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. If this is not indicated no such claim will be admitted at any stage. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to Non-Government Educational Institutions run with no profit motive for which a concession is given. Sales Tax Certificate will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
12. The Guarantee period of the item may be indicated clearly.
13. Payment terms: No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done). (IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty and GST for 5%. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
14. **Acceptance and Rejection:-** I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
15. **All tender amendments will be uploaded on the website only.** Bidders should keep themselves updated and conditions mentioned in the specification needs to be strictly followed.

Tenders to be addressed to :

The project co-ordinator,NTCPWC, room no.606, 6th floor new academic complex, IIT Madras, chennai- 600036

TENDER SPECIFICATION OF THE DGPS

1. The Scope of the supply

Supply of the one numbers of Differential GPS with suitable accessories

2. Requirements

The Differential GPS is required to carry out the bathymetry survey in Ocean/Sea, Lake, River, Streams and any Water body.

3. Technical Specification

Sl.no	Parameter	Description /Range
1	Receiver Type	L1 GPS receiver; 10Hz standard update
2.	Quantity	1' no
3	SBAS Tracking	3-channel, parallel tracking
6	Accuracy	20 ns
7	Hot start time	< 20 s typical (almanac, RTC and position)
8	Differential Options	SBAS
9	Channels	>200
10	SBAS (WAAS) accuracy	Horizontal ≤ 0.5 m
		Vertical ≤ 1 m
11	Connectivity	<ul style="list-style-type: none">• 2 full-duplex RS232• 1 USB Host, 1 USB Device• Wifi/Bluetooth (Optional)
12	Baud Rates	4800 to -115200 bps
13	Timing Output	1 PPS
14	Power	9 to 36 VDC, 5W



15	Antenna Voltage Output	5 VDC
16	Antenna Short Circuit Protection	Yes
17	Antenna Gain Input Range	From 10 to 40 dB
18	Antenna Input Impedance	50 Ω
19	Dimensions	Should not exceed 20 L x 15 W x 10 H (cm)
21	Weight	< 2 kg
22	Status Indicators (LED)	<ul style="list-style-type: none"> • Power, GPS lock, Differential lock, • DGPS position, L-band lock
23	Antenna Connector	TNC (female), straight
24	Operating Temperature	0°C to 50°C
25	Humidity	95% non-condensing
26	Vibration and shock	Able to withstand mechanical shocks and vibration
27	Standards	EN 60950, EN 50371, CE
28	Warranty	1 Year
29	Manuals, Technical literature	<ul style="list-style-type: none"> • Two sets of manual copies with complete technical details such as circuit description, detailed wiring diagrams, The servicing manual, fault-finding flow charts, diagnostic flow charts to be provided, wiring details between different units to be made available to the IITM.




		<ul style="list-style-type: none"> • All necessary details such as drawings, dimensions, weights and power consumption of the system to be provided
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4. Eligibility

The bidder must have a strong presence of at least 10 years in the Indian market 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 in the suitable box and it should be dispatched to NTCPWC,IITM, Chennai 36

9. Delivery

Items should be supplied within 8-12 weeks from the date of receipt of purchase order.

10. Validity

The offer should be valid for 90 days.6