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NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH
Taramani Chennai 600 113
Ministry of Education, [Dept. of Higher Education]
Government of India

No.NITTTTR/S & P/DCEE/Differential Global Positioning System (DGPS)/2021-22

Date: 07.04.2022

To

Delivery required by:

**Stores & Purchase Div.
NITTTTR
Chennai - 600113**

QUOTATION DUE DATE

a. Please send your quotation within the due date
on sealed envelope on or before:

Date :22.04.2022 before 3.00 p.m

b. Delivery required at NITTTTR, Chennai :**Immediately**

Sl. No	Description of Items	Material Code	Approximate Quantity Required
1.	<u>DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS)</u> For Detailed specification refer Annexure -I		1 No.

Note:

GSTIN No. must be specified in your quotation

Sales tax & any other charges should be mentioned separately.

The Warranty, **make** and models of the quoted items should be mentioned clearly.

Cover should be addressed: (Ref. No. should be written on the sealed cover)Name :

Head
Stores and Purchase Division
National Institute of Technical Teachers' Training and Research
Taramani , Chennai 600 113

(For terms and conditions please see overleaf)


DIRECTOR

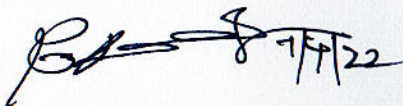
Terms & Conditions

1. The quotation must specify the period within which the supply could be effected from the date of receipt firm orders.
2. Quotation received after the due date mentioned on the reverse will not be considered.
3. Your quotations should be for materials strictly in accordance with the specifications shown. In case you are offering substitutes state clearly the exact specification etc, of the materials offered Drawing sketches or any other technical data should be submitted separately.
4. The prices quoted should clearly specify charges for delivery of the goods to destination indicated overleaf.
5. The prices quoted should include all packing costs and it will be assumed that packing materials (cases etc..) are non-returnable unless otherwise stated.
6. Sales tax or any other taxes if applicable should be shown separately giving the full rate of taxes for each items giving ex-incidence of such levies.
7. The Director reserves the right to accept the whole or part of any quotation without assigning any reason and the lowest or any quotation, will not necessarily be accepted, and the Director's decision shall be the final.
8. Samples must accompany the quotation when so specified or within two days when asked for later.
9. If it is discovered that the materials supplied are not exactly according to the specification, the entire stock will be rejected.
10. We reserve the right to inspect the goods offered at any stage of manufacture / supply at your premises.
11. Any dispute arising out of or relating to this Enquiry shall be deemed to have arisen in Madras and is subject to adjudication of the Madras Courts.
12. Rates quoted once will remain firm for that particular dealing.
13. The quotation should be kept valid for a period of 60 days from the date of opening for acceptance.
14. Payment will be made after confirmation on receipt of the materials in good condition at this Institute (normally within 30 days.) Advance payment will not be entertained at any circumstances.
15. Printed conditions of the firm sent along with the quotation form if any, shall not be binding on us.
16. In case of Printing the Proof should be got approved before final strike.
17. Materials should be supplied at this institute in good condition.
18. Price quoted by the suppliers accepted by the Director is final, and no deviation there from will be accepted without the Director's agreement in writing.
19. If the rates are under D.G.S. & D. Please specify the same clearly enclosing necessary documents.
20. Bidder to be OEM Authorised supplier for the state of Tamil Nadu, attach sufficient authorization.
21. Service facility in Tamil Nadu with address proof.
22. Should have executed DGPS to any Government organization (State / Central) in Southern India in the last 5 years, proof of order copies / performance reports to be attached.
23. Bidder should be in the market of supply of DGPS of same make atleast for a period of five years

ANNEXURE – I

DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS)

SPECIFICATION FOR DGPS		
General Specification		
Sl.no	Characteristics	Specification
1	Reliability	99.99%
2	Channels	555 channel with multi frequency
3	GPS Tracking	L1,L1C, L2C, L2P, L5
4	GLONASS tracking	L1 C/A, L2 C/A, L2P, L3*
5	BeiDou tracking	B1I, B1C, B2I, B2a, B2b, B3I
6	Galileo tracking	E1, E5a, E5b, AltBOC, E6*
7	QZSS tracking and NavIC	L1 C/A, L1C, L2C, L5, L6* and L5**
8	SBAS (EGNOS, WAAS, MSAS, GAGAN)	L1, L5
9	Precise Point Positioning (PPP)	Terrastar CPro
10	Position rate	5Hz
11	Initialization time	RTK signal initialization typically <5 sec
	DGPS ACCURACY	
12	RTK	Hz: 8 mm ± 1 ppm (rms) V: 15 mm ± 1 ppm (rms)
13	Network RTK	Hz: 8 mm ± 0.5 ppm (rms) V: 15 mm ± 0.5 ppm (rms)
14	Static	Hz: 3 mm ± 0.5 ppm (rms) V: 5 mm ± 0.5 ppm (rms)
15	Static long	Hz: 3 mm + 0.1 ppm (rms) V: 3.5 mm + 0.4 ppm (rms)
	Quality Mode	
16	RTK modes	Selectable; Extra Safe, Standard
17	Tilt Compensation	Calibration-free, Resistant to magnetic interferences
	COMMUNICATION	
18	4G LTE module	QUECTEL EG25-G LTE FDD, LTE TDD, UMTS, GSM
19	RTK data protocols	RTCM 2.1, 2.3, 3.0, 3.1, 3.2, 3.3, 3.4, CMR, CMR+, RTCA, NOVATELX
20	NMEA Output	NMEA v3.1, NMEA v4.1
21	UHF radio module	SATEL TR4+, 500mW, 1000mW transceiver, 403–473 MHz; (opt)
22	Bluetooth®	2.1 +EDR, V5.0 QR-iConnect functionality
23	WLAN	802.11 a/ac/b/g/n Hotspot / client mode
24	TNC connector	UHF antenna
25	Communication port	USB, serial & power

 7/11/22

	Power Supply	
26	Operating time	12.5 h in static / 11 h in rover mode
27	External power	9 V to 28 V, LEMO® plug
28	Dimensions	Height 75 mm, ø 166.8 mm
29	Weight	1.14 kg without batteries
30	Environmental protection	IP68 (IEC 60529)
		Withstands powerful jets and temp. immersion under water
		MIL-STD-810G 1 506.6 & 1 512.6, Fully dust tight
		MIL-STD-810G 1 510.6
31	Humidity	MIL-STD-810H 1 507.6
32	Vibration	Mechanical stress resistant
		according to ISO 9022-36-05
33	Shock	Withstands 2 m drop onto
		hard surface
	INTERFACES	
34	Keyboard	On/off button
35	LED status indicators	Position, RTK, Power, Bluetooth
36	Data Recording & Memory	Dual; microSD card and 8 GB
		internal memory
37	GSM/TCP/IP	Removable SIM card
38	IMU Technology	Receiver (Rover) Should provide best accuracy even under tilt upto 60°
	Mandatory Specifications	
1	Batteries	Hot-swappable, Li-Ion 3.4 Ah / 7.2 V
2	Mobile Connectivity	Receivers Should have QR Code - i Connect Supporting
3	GSM Antenna	Should be a Internal 4G LTE module (Extra antenna Not necessary)
4	Housing	Receiver should be Metallic to work in extreme condition (Temp -40° to +65° C)

	Scope of Supply	DGPS Receivers 2 units along with 4 rechargeable batteries, 2 chargers, downloading cable, tribrach with adapter 2 nos. wooden tripod 2 nos, carbon fiber pole 1 no., RTK software android for base start up , full CAD view, zoom pan rotate, import export, dxf, shape, kml, exchange files from cloud server, share files by email Bluetooth along with Post processing software for processing static data.
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[Handwritten Signature] 1/4/22