

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
INDIAN INSTITUTE OF REMOTE SENSING (IIRS)  
DEHRADUN**

**Tender for Total Station with Integrated GNSS**

**Bids to be submitted online**

**Tender No.: IIRS/Purchase and Stores Section/GI202100001101 dated 27-09-2021**

## **A. Tender Details**

Tender No : **IIRS/Purchase and Stores Section/GI202100001101**

Tender Date : **27-09-2021**

Tender Classification: **GOODS**

Purchase Entity : **Purchase and Stores Section**

Centre : **INDIAN INSTITUTE OF REMOTE SENSING (IIRS)**

### **Procurement of Total Station with Integrated GNSS and Two years AMC [For 2nd and 3rd Year]**

Tender Details for Procurement of Total Station with Integrated GNSS and Two years AMC [For 2nd and 3rd Year]

#### **A.1 Tender Schedule**

Bid Submission Start Date : **06-10-2021 11:00**

Bid Clarification Due Date : **03-11-2021 14:00**

Bid Submission Due Date : **08-11-2021 17:00**

Bid Opening Date : **09-11-2021 11:00**

Price Bid Opening Date : **30-11-2021 11:00**

## **B. Tender Attachments**

NA

### **Instructions To Vendors**

1. Quote for 2 nd & 3rd year AMC is mandatory. AMC starts after completion of Standard warranty period.
2. Compliance to all the Technical and Commercial Terms and Conditions.
3. IIRS eligible for availing Concessional GST and Custom Duty.
4. OEM Authorization Certificate .
5. Two Part Tender.

## C. Bid Templates

### C.1 Technical Bid - Total Station with Integrated GNSS

#### 1. Total Station with Integrated GNSS

##### Item specifications for Total Station with Integrated GNSS

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Robotic Total Station (RTS): Angular Measurement	Accuracy: 1" (0.3 mgon) or better	Yes / No / Explain		
2	RTS Distance Measurement	<ul style="list-style-type: none"> <li>•Measurement range (Prism mode): 2 – 3000 m or better;</li> <li>•Accuracy with Prism: 2 mm + 2 ppm or better;</li> </ul>	Yes / No / Explain		
3	RTS Robotic Operation	<ul style="list-style-type: none"> <li>•Robotic Range: more than 300 m;</li> <li>•Point Precision: &lt; 3 mm at 300 m or better;</li> <li>•Search Distance: more than 300 m;</li> <li>•Search Time: 2-10 sec</li> </ul>	Yes / No / Explain		
4	RTS Motorization	<ul style="list-style-type: none"> <li>•Rotation speed: 90 deg. per sec. or better;</li> <li>•Time to change face: 2-4 sec or better</li> </ul>	Yes / No / Explain		
5	RTS Coarse Levelling	Electronic coarse levelling range: +-3 deg or better	Yes / No / Explain		
6	RTS Automatic Aiming and Locking	<ul style="list-style-type: none"> <li>•Target aiming range: 800 m or better (with prism);</li> <li>•Target locking range: 800 m or better (with prism);</li> <li>•Accuracy: 1" or better</li> </ul>	Yes / No / Explain		
7	RTS Centering	<ul style="list-style-type: none"> <li>•Centering system with minimum 3-pin;</li> <li>•Plummet: Optical;</li> <li>•Magnification: 2x or better;</li> <li>•Focusing distance: 1 m to infinity or better</li> </ul>	Yes / No / Explain		

8	RTS Reflector Telescope	<ul style="list-style-type: none"> <li>•Magnification: 30x or better;</li> <li>•Focusing range: 2 m to infinity or better;</li> <li>•Aperture size: 50 mm or better;</li> <li>•Field of view: 1 deg. - 3 deg. or better</li> </ul>	Yes / No / Explain		
9	RTS Power Management	<ul style="list-style-type: none"> <li>•Internal battery: Lithium-ion rechargeable battery with adapter and one additional set of battery;</li> <li>•Operating time with one battery: 6 hours or more continuous working;</li> <li>•Provision of external power supply</li> </ul>	Yes / No / Explain		
10	RTS Data Storage	<ul style="list-style-type: none"> <li>•Flash/Internal memory: &gt; 2 GB;</li> <li>•External Memory: 32 GB or higher through USB drive/SD Card</li> </ul>	Yes / No / Explain		
11	RTS Communication	<ul style="list-style-type: none"> <li>•External foot connector (USB cable connection, External power supply);</li> <li>•Wireless communication (Frequency: 2.4 GHz, Bluetooth enabled)</li> </ul>	Yes / No / Explain		
12	RTS Environmental Parameters	<ul style="list-style-type: none"> <li>•Operating Temperature: -20 degC to +50 deg.C or larger;</li> <li>•Dust and Water proofing: IP54 or better;</li> <li>•Humidity: &gt; 95% condensing</li> </ul>	Yes / No / Explain		
13	RTS Prism type	Circular or 360 degree (Standard)	Yes / No / Explain		
14	RTS Display and Keyboard	<ul style="list-style-type: none"> <li>•Display: Digital colour touch screen (3.5" or more);</li> <li>•Keyboard: Qwerty keypad</li> </ul>	Yes / No / Explain		
15	RTS Security	Dual-layer password protection	Yes / No / Explain		

16	GNSS Receiver (GNSS-R) Characteristics	<ul style="list-style-type: none"> <li>•Multi-frequency;</li> <li>•Satellite signal tracking/utilization: GPS, NavIC/IRNSS, Galileo, GLONASS, BeiDou, QZSS, SBAS (GAGAN));</li> <li>•Fast Search engine for quick acquisition and re-acquisition of GNSS signals;</li> <li>•Data format support: NMEA, ATOM, CMR, CMR+, RTCM, CMRx, sCMRx etc.</li> </ul>	Yes / No / Explain		
17	GNSS-R Real-Time Accuracy	<ul style="list-style-type: none"> <li>•Real-Time DGPS position:- H/V: 25 cm + 2 ppm / 50 cm + 2 ppm or better;</li> <li>•RTK position:- H/V: 8 mm + 2 ppm / 15 mm + 2 ppm or better;</li> <li>•Network RTK:- H/V: 8 mm + 1 ppm / 15 mm + 1 ppm or better;</li> <li>•Post-Processed Kinematics (PPK): H/V: 8 mm + 1 ppm / 15 mm + 1 ppm or better</li> </ul>	Yes / No / Explain		
18	GNSS-R Post-Processing Accuracy	<ul style="list-style-type: none"> <li>•Static and fast static:- H/V: 4 mm + 1 ppm / 6 mm + 1 ppm or better;</li> <li>•High precision static:- H/V: 3 mm + 0.5 ppm / 4 mm + 0.5 ppm or better</li> </ul>	Yes / No / Explain		
19	GNSS-R Interface	<ul style="list-style-type: none"> <li>•Display: Digital colour touch screen;</li> <li>•Input/output interface: (USB, serial link, Bluetooth)</li> </ul>	Yes / No / Explain		
20	GNSS-R Data Storage (Receiver)	<ul style="list-style-type: none"> <li>•Internal memory: 2 GB or more;</li> <li>•External memory: 32 GB or more extendable</li> </ul>	Yes / No / Explain		
21	GNSS-R Operations	<ul style="list-style-type: none"> <li>•RTK base and rover;</li> <li>•RTK network rover and RTK Antenna;</li> <li>•Modes: Static and RTK with GSM/GPRS and internal radio;</li> <li>•Post-processing</li> </ul>	Yes / No / Explain		

22	GNSS-R Power Management	<ul style="list-style-type: none"> <li>•Internal battery (&gt;2 Nos.): Lithium-ion rechargeable and exchangeable battery with adapter;</li> <li>•Operating time with one battery: 6 hours or more continuous working;</li> <li>•Provision of external power supply</li> </ul>	Yes / No / Explain		
23	GNSS-R Environmental Parameters	<ul style="list-style-type: none"> <li>•Operating Temperature: -30 deg. C to +60 deg. C or larger;</li> <li>•Storage Temperature: -40 deg. C to +60 deg. C or larger;</li> <li>•Dust and Water proofing: IP54 or better;</li> <li>•Humidity: &gt; 95% condensing</li> </ul>	Yes / No / Explain		
24	Controller for operating RTS and GNSS-R (base and rover)	Windows based controller with operating software, battery, > 4GB internal memory, bluetooth/wi-fi enabled, touch screen and Qwerty hard keypad	Yes / No / Explain		
25	Accessories: Cables	All power cables and USB cables for connecting various modules of the equipment and external power supply	Yes / No / Explain		
26	Accessories: Poles	<ul style="list-style-type: none"> <li>• GNSS (base and rover) pole with snap locks at different heights, prism pole;</li> <li>•Clamp arrangement for attaching holder to all poles</li> </ul>	Yes / No / Explain		
27	Post Processing Software(s) (Licence free or with license keys and installation DVD)	<ul style="list-style-type: none"> <li>•Field survey software (compatible with robotic total station and GNSS simultaneously) for data collection in static and kinematic modes;</li> <li>•Processing of raw data and post data analyses;</li> <li>•Import and Export to RINEX and Industry formats</li> </ul>	Yes / No / Explain		

28	Enclosures	<ul style="list-style-type: none"> <li>•Carrying case compatible for long distance travel via road and train;</li> <li>•Separate hard containers for robotic total station, GNSS receiver, smart antenna, poles and other accessories</li> </ul>	Yes / No / Explain		
29	Tripod and Bipod	Heavy duty/Wooden Tripod (carrying strap and plumb bob) for base & total station and bipod for rover	Yes / No / Explain		
30	Tool kit	Basic tools for calibrating, operating and packaging of the instrument	Yes / No / Explain		
31	Other / Miscellaneous	All other necessary accessories as applicable	Yes / No / Explain		
32	Warranty	Minimum 1 year post sale support (onsite)	Yes / No / Explain		
33	Technical Demonstration	Before tender opening	Yes / No / Explain		
34	Training	Minimum 3 days post sale training cum demonstration on calibration, operation, field data collection at IIRS Dehradun	Yes / No / Explain		
35	AMC	2 Years (For second and Third Year) AMC quote is required	Yes / No / Explain		

## Supporting Documents required from Vendor

### 1. Compliance to Technical Specifications

### 2. Compliance to Commercial Terms

### 3. Warranty

### 4. Quote for AMC

### 5. Training [ Minimum 03 days training cum Demonstration on calibration, operation field data collection at IIRS, dehradun



5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Supply at IIRS Dehradun	Yes / No / Explain	
2	Delivery Terms : The Quotation should be FOR Destination/Door Delivery Basis Delivery Place: Indian Institute of Remote Sensing, 4 Kalidas Road Post Box-135, Dehradun, Uttarkhand Pin-248001.	Yes / No / Explain	
3	Packing and Forwarding Charges Inclusive/Exclusive [in case of Exclusive please indicate the applicable Percentage]	Yes / No / Explain	
4	Delivery Period [in Weeks/Months]	Yes / No / Explain	
5	Freight Charges, if any	Yes / No / Explain	

6	<p>Taxes and Duties</p> <p>1. Government of India has implemented Goods and Services Tax [GST] w.e.f 01.07.2017. The Tenderer[s] should mandatorily possess a valid GSTIN along with the GST Registration Certificate. Please send duly self-attested certificate of GST Registration along with offer[s], in the absence of which your offer[s] will be invalid and shall not be considered.</p> <p>2. Goods and Service Tax [Intra State] Indian Institute of Remote Sensing [IIRS], Dehradun/ISRO Centres/Units across India is eligible for availing Concessional GST issued by Government of India, Ministry of Finance, Department of Revenue, vide Notification No. 45/2017-Central Tax [Rate] dated 14.11.2017 [CSGT 2.5%] and Government of Uttarkhand, Finance Section-8, vide Notification No. 973/2017/9(120)/IXXVII(8)/2017, dated 23.11.2017 [SGST 2.5%] for procurement of Goods against production of Certificate issued by an Officer not below the rank of Deputy Secretary to Government of India certifying that the Goods being procured will be used for Research purposes only.</p> <p>3. Goods and Service Tax [Inter State] Indian Institute of Remote Sensing [IIRS], Dehradun/ISRO Centres/Units across India is eligible for availing Concessional GST issued by Government of India, Ministry of Finance, Department of Revenue, vide Notification No. 47/2017-Integrated Tax [Rate] dated 14.11.2017-IGST 5% for procurement of Goods against production of Certificate issued by an Officer not below the rank of Deputy Secretary to Government of India certifying that the Goods being procured will be used for Research purposes only.</p>	Yes / No / Explain	
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7	<p>Customs Duty: Indian Institute of Remote Sensing [IIRS], Dehradun is exempted from payment of Customs Duty vide Notification No.51/96 customs dated 23.07.1996 amended vide Notification No. 24/2007 Customs dated March 01, 2007 . The necessary Customs Duty Concessional Certificate [CDEC] shall be provided by IIRS.</p> <p>Tenderer[s] are requested to take note of this aspect and submit the Offer clearly mentioning that the quoted Price for Imported Items does not include Customs Duty as per above Notification. While requesting for issue of CDEC for the bought out Imported Items if any, the Tenderer[s] should mention the Item Description, Quantity and Value for which CDEC is to be provided for the bought out Imported Items. The necessary proof should be produced while requesting for issue of CDCC from IIRS.</p> <p>The Contractor shall bear Demurrage Charges, if any, incurred by the Purchaser due to delayed presentation of despatch documents to the Bank/Purchaser or on account of incomplete documents such as Invoice, Packing List etc.</p>	Yes / No / Explain	
8	<p>Payment Terms: For Supply of Goods: Our Standard Payment Terms is 100% payment within 30 days after Receipt and Acceptance of Stores at our Site.</p> <p>For AMC: Payment shall be made on quarterly/half yearly basis on certification of user department.</p>	Yes / No / Explain	
9	No Tender Fee/EMD shall be payable for submission of Tender through e-procurement.	Yes / No / Explain	
10	Advance Payment Bank Guarantee: Normally Advance Payment will not be considered. In case of any Advance Payment, it shall be supported by an Equivalent Bank Guarantee from a Nationalised Bank valid till receipt of the Final Product/Stores plus 60 days.	Yes / No / Explain	

11	<p>Bank Guarantee towards Free Issue of Materials: The successful Tenderer[s] shall furnish Bank Guarantee [BG] towards the cost of Free Issue Materials issued by Purchaser towards adequate Security for the FIM for the execution of the Contract and the said Tenderer will be duly authorized by Purchaser to collect the free issue materials from IIRS site subject to the furnishing of the aforesaid Bank Guarantee. The BG is to be kept valid till supply and acceptance of the final product. [If applicable]</p> <p>The Bill of Material for the material used for the Fabrication Work and available balance to be prepared by you and countersigned by the User Department is to be sent along with the final bill for arranging the balance payment.</p>		
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12	<p>Performance Security [Security Deposit cum Performance Bank Guarantee] -  The Successful Tenderer[s] shall execute Performance Security for 3% of the value of the PO towards satisfactory execution of the PO including fulfilment of Warranty obligations. Subsequently, all tenders issued/purchase orders/contracts concluded till 31.12.2021 with percentage of 3% Performance Security shall continue for the entire duration of the contract and there will be no subsequent increase of Performance Security even beyond 31.12.2021. The Performance Security shall be executed through Account Payee Demand Draft/Bankers Cheque/Fixed Deposit Receipts or Bank Guarantee issued by a Nationalized Bank/Scheduled Bank. The Bank Guarantee must be valid for the entire Contract Period and an additional period of 60 days beyond the contractual obligations. The BG shall be executed on a Non-judicial stamp paper of appropriate value as per our specimen.</p> <p>In case the successful Tenderer[s] fails to furnish the Performance Security within 15 days after the receipt of PO or on signing of the Contract or any extension thereof, the Purchase Order shall be cancelled or terminated. The EMD if any, executed shall be forfeited and appropriate penal action shall be initiated. The performance Security will not carry any interest and shall be returned after completion of all the contractual obligations. Central Public Sector Undertakings [PSUs]/ Public Sector Enterprises [PSEs]/Autonomous Bodies are exempted from payment of Performance Security [PS], and instead, an Indemnity Bond shall be executed in lieu of PS.</p>	Yes / No / Explain	
13	<p>Warranty/Guarantee -  Tenderer[s] are requested the Indicate Applicable Standard Warranty/Guarantee Period. All the replacements during the Warranty period shall be carried out by the successful Tenderer[s] Free of all Cost including To and Fro Freight Charges.</p>	Yes / No / Explain	

<p>14</p>	<p>Liquidated Damage - The time and date stipulated in the contract for completion of the work shall be deemed to be the essence of the contract. If the Contractor fails to deliver the Stores within the time specified in the Contract or any extension thereof or if the Contractor fails to maintain the required progress or comply with the relevant provisions of the general conditions of contract or special conditions of contract, if any and clear the site on or before the contract or extended date of completion, the Purchaser shall, without prejudice to any other right or remedy available under the law to Purchaser on account of such breach, recover from the Contractor as Liquidated Damages a sum one-half of one percent [0.5 percent] of the Contract price of the undelivered Stores for each calendar week of delay or part thereof. The total Liquidated Damages shall not exceed Ten percent [10 percent] of the Contract price of the unit or units so delayed.</p> <p>In case of delay in delivery of the Stores beyond the delivery date stipulated in the Purchase Order or any extension thereof, such Stores shall be received without prejudice to the right of the Purchaser to claim Liquidated Damages and without prejudice to the terms and conditions of the Purchase Order.</p>	<p>Yes / No / Explain</p>	
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<p>15</p>	<p>Termination and Short Closing of the Contract - Under the normal circumstances, Termination/Short Closing of the Contract .are not foreseen. However, IIRS reserves the right to terminate the Contract by giving 30 Days prior notice in the following circumstances:-</p> <p>Due to repeated non-performance in the execution of Contract.</p> <p>If the Contractor fails to deliver the Stores/Services within the stipulated time or any extension thereof, granted by the Purchaser.</p> <p>If the Contractor fails to perform any other obligations under this Contract.</p> <p>If the Contractor becomes bankrupt or otherwise insolvent.</p> <p>Owing to deficiency of Stores/Service, breach of Contract.</p> <p>For inefficiency, indiscipline, irregularity, insincerity, indifference in work, disobedience, doubtful credentials/integrity, etc., at any point of time during the Contract period.</p> <p>If the Contractor fails to Honour the whole or any part of Contract including failure to deliver the Stores/Services within the time stipulated in the Contract.</p> <p>If the Contractor is found to have made any false or fraudulent declaration or statement to obtain the Contract or he is found to be indulging in unethical or unfair trade practices.</p> <p>When both the parties agree mutually.</p> <p>Any special circumstances, which must be recorded to justify the cancellation or termination of Contract.</p> <p>To Terminate the Contract wholly or partly without assigning any reason.</p>	<p>Yes / No / Explain</p>	
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16	Pre-Delivery Inspection [PDI - if Required] - The successful Tenderer[s] has to arrange for the necessary PDI of the Stores at the Contractor Factory Premises to enable IIRS Engineers to carry out PDI. The PDI is applicable wherever the RFP document/Scope of Work calls for such an inspection.	-	
17	Jurisdiction - The Courts within Dehradun will have the Jurisdiction to deal with and deciding any matter arising out of this contract.	Yes / No / Explain	
18	Applicable Law - The contract shall be interpreted and construed and governed by the Laws of India.	Yes / No / Explain	
19	Language and Measures - All documents pertaining to this Tender including technical specification or any other writings shall be written in English Language. The metric system of measurement shall be used exclusively in this Tender	Yes / No / Explain	
20	Validity of the Offer - Minimum of 120 days from the date of opening the Tender	Yes / No / Explain	
21	Registration Certificate issued by DPIIT for Countries sharing Land Border with India	Yes / No / Explain	
22	Please indicate the GeM Seller ID [Mandatory]	Yes / No / Explain	
23	Full Address of Vendor	Yes / No / Explain	
24	GST, PAN, MSME, Udhhyoga Aadhaar (If applicable), Bank Details of the Vendor.	Yes / No / Explain	

25	<p>Force Majeure:  FMC-1: Neither party shall bear responsibility complete or partial non-performance of any of his obligations [except for failure to pay any sum which has become due on account of receipt of goods under the provisions of the Purchase Order/Contract], if the non-performance results from such force majeure circumstances such as, but not restricted to, flood, fire, earthquake, civil commotion, sabotage, explosion, epidemic, quarantine restriction, strike, lock out, freight embargo, acts of the Government either in its sovereign or its contractual capacity, hostility, acts of public enemy and other acts of God as well as war or revolution, military operation, blockade, acts or actions of state authorities or any other circumstances beyond the control of the parties that have arisen after the conclusion of Purchase Order/Contract. In such circumstances, the time stipulated for the performance of an obligation under the Purchase Order/Contract may be proportionately extended.</p> <p>FMC-2: The party for whom it has become impossible to meet the obligation under this contract due to force majeure condition shall notify the other party in writing not later than 7 days from the date of the occurrence and cessation of the force majeure condition/s. In the event of delay lasting over one month, arising from force majeure causes, the Purchaser reserves the right to cancel the contract without any obligation to compensate the Tenderer in any manner. Unless agreed by both the parties, in writing, the Contractor shall continue to perform his obligations under the Purchase Order/Contract as far as is practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.</p>	Yes / No / Explain	
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26	<p>FMC-3: Any Certificate issued by the Chamber of Commerce or any other competent authority or organization of the respective country shall be sufficient proof of commencement and cessation of the above circumstances. In case of failure to carryout complete or partial performance of an obligation for more than 60 days, either party shall reserve the right to terminate the Contract totally or partially. A prior written notice of 30 days to the other party will be given informing of the intention to terminate without any liability.</p>	Yes / No / Explain	
27	<p>Arbitration [For Indigenous] - In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by Director, Indian Institute of Remote Sensing [IIRS], Dehradun in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 together with amendments thereto or any modification thereof. The expenses for the Arbitration shall be paid as may be determined by the Arbitrator. The Arbitration shall be conducted in Dehradun. The considered and written decision of the Arbitrator shall be final and binding between the Parties.</p> <p>Work under the contract shall be continued by the Tenderer during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the Purchaser or unless the matter is such that the works cannot be possibly continued until the decision [whether final or interim] of the Arbitrator is obtained.</p>	Yes / No / Explain	

28	Arbitration [For Public Sector Undertakings] - In the event of any dispute or difference relating to the interpretation and application of the Contract, such dispute or difference shall be settled amicably by mutual consultations of the good Offices of the respective parties. If such a resolution is not possible, then the unresolved dispute or difference shall be referred to the Sole Arbitrator appointed in the Department of Public Enterprise under the Permanent Machinery for Arbitration.	Yes / No / Explain	
29	Arbitration [For Overseas Supplier] - In the event of any dispute or difference arising out of or in connection with this Purchase Order, such dispute or difference shall be settled amicably by mutual consultants or through the good offices of the respective parties. If such resolution is not possible, then the unresolved dispute or difference shall be referred to the Sole Arbitrator appointed in accordance with provisions of the ICADR Arbitration Rules, 1996 of the International Centre for Alternative Dispute Resolution, New Delhi. The Arbitration shall be conducted in India in accordance with the Rules & Procedures of the Arbitration and Conciliation Act of 1996 or any re-enactment or modification thereof. The expenses for the Arbitration shall be paid as may be determined by the Arbitrator.	Yes / No / Explain	

### C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	PT Two part Offered Price	Remark
1	Total Station with Integrated GNSS	1.00 Sets		-			

### Common charges (Applicable for all items)

<b>Goods &amp; Service Tax</b>	
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