Dear Sirs,

Please submit your sealed quotation, in the Tender Form enclosed here along with the descriptive catalogues/pamphlets/literature, superscribed with Our Ref. No. and Due Date for the supply of the following items as per the terms & conditions mentioned in Annexure:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Description of Items with Specifications</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supply and Installation of Integrated Snow Pack Analyzer measuring snow depth, snow density, snow wetness, dielectric constant, and snow water equivalent (SWE) with GSM based telemetry. Make: Sommer, Austria</td>
<td>NO</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Detailed Specifications as per Annexure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DELIVERY AT: IIRS, DEHRADUN

MODE OF DESPATCH: ON SITE

DUTY EXEMPTIONS

SPECIAL INSTRUCTIONS: TWO PART TERMS ATTACHED

SPECIFIC TERMS

ASHA CHANDRAN L
PURS. & STORES OFFICER
For and on behalf of the President of India
The Purchaser
Annexure-I

Specifications of Integrated Snow pack analyzer (SPA) & components

1. Snow Pack Analyser with 3 ribbon cables – two horizontal (10 and 60 cm) and one slope cable (up to 4 bands per analyser possible)

   Snow Pack Analyzer, SPA, Impedance analyzer, with multiplexer, 4 channels
   Calculates the contingents of ice, water and air into the snow pack by measuring the complex impedance.
   - Connection of up to 4 SPA- sensors
   - Measuring frequency: 10 kHz....180kHz
   - Range: capacitance 10pF....6000pF, Widerstand 100....10MW
   - Power supply: 5...15VDC
   - Current: during measurement 50mA / 5 sec, sleep 1mA
   - Output: RS 232

2. Snow Pack Analyzer, SPA, SPA- sensor 5m, (3 Nos, Two Horizontal, One slope)
   horizontally or angular mounting
   Sensor for measuring the complex impedance.
   including cable 6 m with connector

3. SPA, Gearbox for Impedance analyzer
   For SPA "stand-alone" version.
   - Gear box, stainless steel, 200 x 300 x 155mm, with certification, IP 66
   Component integration for Impedance analyzer-
   Integration power supply
   lighting protection

4. Snow depth sensor, USH-8, ultrasonic, range: 0-8m,
   output: 4-20mA or serial (One No.)

5. Snow Pack Analyzer, SPA, mounting accessories for angular anchoring
   guiding ropes, clamping set for mast d=114 mm, & 600 mm
   clamping set for ground, distance sensor for adjustment
   of the SPA sensor

6. Snow Pack Analyzer, SPA, mounting accessories for horizontal anchoring (10 & 60 cm cable)
   mounting frame, for SPA sensor l= 5 m, adjustable
   altitude for sensor

GSM/CDMA based telemetry system

MICRO SPIDER DATA LOGGER COMMS CABLE with
   Micro Spider to Computer Lead (2 metres long)
   GSM Modem for Central Station
   Software Utility to receive and Archive Data vis GSM at Central Station
   SC043-187 NULL 2 MODEM CABLE DB9F TO DB9F
   Weather Proof Enclosure for Datalogger and Battery
   Solar Panel 20W with Mounting
   Solar Charge Controller
   Mast for Enclosure & Solar Panel

7. Packaging and shipment at user destination
TERMS & CONDITIONS

1. The entire SPA System should be supplied with all accessories and should be installed by the vendor at sites decided by IIRS. The system should be made full operational on turn-key basis including communication devices/charges for a period of 3 years.

2. Communication: In case GPRS/GSM network is not available the system should store data in the data logger/flash card with 15min. interval (Industrial grade) for at least 6 months, which can be received at regular interval perfectly through flash cards (Industrial Grade).

3. Data logging interval would be from 5 minutes to one hour. Fencing and site preparation charges are to be included in the total cost.

4.1 Warranty: Standard Warranty of SPA is one year from date of supply & Installation.

4.2 Extended Warranty: Extended Warranty for 2 years after completion of standard warranty of one year from date of installation will be provided by the vendor. Accordingly the vendor has to quote the rate separately.

4.3 CAMC: Comprehensive Annual Maintenance Services of the SPA will be provided by the vendor after completion of 3 years warranty (Standard Warranty for one year + 2 years extended warranty) Accordingly the vendor has to quote the rates separately.

5. In case of any manufacturing and replacement of parts, it has to be replaced with similar or higher standard spare parts. Calibration certificate of data logger and other instruments should be provided.

6. The vendor has to ensure to provide the spare parts for SPA at least 5 years after completion of 3 years warranty and availability of the same.
ANNEXURE to Tender No. GIER 2017000184-01

Date: 23/10/2017

SPECIAL TERMS AND CONDITIONS FOR SUBMITTING TWO PART BID

1. This is a two part tender viz., Techno-Commercial Bid (consisting of Technical Specifications, Commercial terms & condition etc.) and Price Bid. Hence, quotation should be submitted in separate sealed covers super-scribing “Tender No. GIER 2017000184-01, Due on 24/11/2017 at 14.00 Hrs (Techno-Commercial Bid)” and “Tender No. GIER 2017000184-01, Due on 24/11/2017 at 14:00 Hrs (Price Bid)”

2. Both the sealed tenders (Techno commercial & Price bid) should be kept in one big cover super scribing Tender for Supply and Installation of Snow Pack Analyzer against Enquiry No. GIER 2017000184-01, Due on 24/11/2017 at 14.00 Hrs and put in the Tender Box available in Purchase Division, IIRS or send by post or Courier within the due date and time prescribed.

3. The Techno-Commercial Bid should clearly indicate the technical details, scope of supply, payment terms, delivery terms, delivery period, taxes and duties, warranty, guarantee, security deposit, performance bank guarantee, etc. under separate heads. Please note that the price should NOT be indicated in the Techno-Commercial Bid

4. Tender forms can be purchased from Purchase & Store Section IIRS, Dehradun on all working days on payment of ₹ 573/- in the form of DD drawn in favor of Pay & Accounts Officer, IIRS Dehradun payable at Dehradun or can be downloaded from www.iirs.gov.in. When tender forms are downloaded, DD for ₹ 573/- drawn in favor of Pay & Accounts Officer, IIRS payable at Dehradun shall be attached with Technical Bid.

5. Only Techno-Commercial bid will be opened on the date of tender opening. The price Bids of those tenderers whose Techno-Commercial Bids are found to be meeting our specifications/ requirements will be opened. The bidders are allowed to attend the tender opening on the date and time of opening.

6. Late and Delayed Tenders will not be considered. Therefore, please ensure that your tender is posted well in time to reach us before the due date and time.

7. Fax/Email offers shall not be considered.

8. All the pages of your offer should be signed/initialed by competent authority and affixed with your company’s Seal.

9. EMD of Rs. 60,000/- to be submitted along with the Technical Bid in the form of Crossed Demand Draft drawn on any Nationalized / scheduled bank in favor of Pay & Accounts Officer, IIRS, payable at Dehradun. Quotation received without EMD will not be considered. The EMD of unsuccessful bidder will be returned after finalization of order.

[Signature]
(Purchase & Stores Officer)
Specific terms and conditions to the tender:-

1. Please submit the Technical Details / Catalogue / Make/ Model/Data Sheets.
2. The offer should be valid for a period of 90 days from the date of opening of Tender.
3. Please send the quotations ONLY in 'SEALED COVER' indicating our tender enquiry No. and due date by speed post so as to reach us on or before the due date & time. IIRS will not be responsible for any postal delays.
4. E-mail/ fax quotations 'WILL NOT BE ACCEPTED'.
5. Please quote the percentage of GST applicable.
6. Our standard delivery term is FOR, IIRS. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lump sum amount.
7. We are exempted from the payment of Customs Duty and necessary exemption certificate shall be issued upon request.
8. Payment Term: Payment will be made within 30 days from the date of receipt and acceptance of the item at our site for order value up to 2.00Lakhs. For order value above 2.0 Lakh, 90% payment will be made within 30 days and 10% against submission of Performance Bank Guarantee for the warranty period (wherever warranty is applicable). The Performance Bank Guarantee should be valid for a period of 2 months beyond the completion of the warranty period.
9. For foreign orders our Standard Payment Term is Sight Draft.
10. Liquidated Damages – The delivery period quoted should be realistic. The delivery period so quoted and mentioned in the order is the essence of the order/contract. In case of delay in delivery of material as per the delivery schedule, Liquidated Damage @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value shall be levied. Wherever, installation and commissioning is also involved, the supply will be deemed to have been completed only when the entire Stores is supplied, installed and accepted.
11. Security Deposit: - Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @ 10% of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations.
12. In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer.
13. If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.
14. Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.

***

Purchase & Stores Officer