

GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
INDIAN INSTITUTE OF REMOTE SENSING
IIRS

Ph No: 0135 - 2524317, 4318
Fax 0135 - 2748041
Email: pns@iirs.gov.in

DEHRADUN
PURCHASE & STORES
INVITATION TO TENDER

Date :20/09/2018

M/s

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Our Ref No : GIER 2018-000118-01

Tender Due: 14:00 Hrs ISTon 17/10/2018

Opening : 15:00 Hrs ISTon 17/10/2018

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(Form No:)

S.No.	Description of Items with Specifications	Unit	Quantity
1	Hyperspectral Underwater Spectro-radiometer details as per specifications Annexure-A	Nos.	1

DELIVERY AT: IIRS, DEHRADUN

MODE OF DESPATCH DOOR DLVRY

DUTY EXEMPTIONS

SPECIAL INSTRUCTIONS TWO PART

SPECIFIC TERMS

KALPANA R
PURS. & STORES OFFICER
For and on behalf of the President of India
The Purchaser

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 quote the percentage of GST applicable.
4. 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.
5. We are exempted from the payment of Customs Duty and necessary exemption certificate shall be issued upon request.
6. **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.
7. For foreign orders our Standard Payment terms is Sight Draft.
8. **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.
9. **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.
10. 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.
11. 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.
12. Whenever samples are required to be submitted along with the quotation, offer without sample will not be considered.



Purchase & Stores Officer

SPECIAL TERMS AND CONDITIONS FOR SUBMITTING TWO PART BID

10. 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 2018000118-01, Due on 17/10/2018 at 14:00 Hrs (Techno-Commercial Bid)**" and "**Tender No. GIRS 2018000118-01, Due on 17/10/2018 at 14:00 Hrs (Price Bid)**"
11. Both the sealed tenders (Techno commercial & Price bid) should be kept in one big cover super scribing **Tender for Hydrospectral Underwater Spectro-radiometer** against Enquiry No **GIRS 2018000118-01, Due on 17/10/2018 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.
12. 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
13. Tender forms can be purchased from Purchase & Store Section IIRS, Dehradun on all working days on payment of ₹ 560/- 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 ₹560/- drawn in favor of Pay & Accounts Officer, IIRS payable at Dehradun shall be attached with Technical Bid.
14. 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.
15. 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.
16. Fax/Email offers shall not be considered.
17. All the pages of your offer should be signed/initialed by competent authority and affixed with your company's Seal...
18. **EMD of ₹ 140,000/-** 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.


[Purchase & Stores Officer]

Annexure – A: Detailed Specification: Underwater Spectroradiometer

SL. NO.	Description	Quantity Required
I	Supply, installation, demonstration & training of Underwater Spectroradiometer along with accessories and software.	01 Set
IMPORTANT INSTRUCTIONS		
I	The Underwater Spectroradiometer along with all accessories, spares, software, etc shall be procured from a single source.	
II	Competitiveness of the bidder would be evaluated based on the FOR Destination value of all the items taken together.	
III	Supplier should provide at least 02 trainings at IIRS/ISRO Dehradun: one on use of the instrument in underwater and second on general instrument handling/post data processing/calibration procedures	
IV	Vendor should provide calibration certificate, manuals and installation procedures	
V	Indian dealer/supplier of foreign products must provide original manufacturer's certificate of dealership. They should have at least 10 years of experience in dealing with similar spectroradiometers/instruments and their supply at reputed institutes/organisations in India. Copy of such purchase orders may be enclosed with the quotes.	

S.No.	Particular	Specification
1.	Spectral Range	350 – 2500 nm (at least)
2.	Spectral Resolution	≤ 3 nm upto 1000 nm ≤ 8 nm above 1000 nm
3.	Spectral Sampling (Bandwidth)	≤ 1.5 nm upto 1000 nm ≤ 4 nm above 1000 nm
4.	Detectors	Should have linear array technology and cooled InGaAs detectors.
5.	Stray Light	< 0.1% in entire range of wavelength
6.	Calibration	± 10% in entire range of wavelength. All calibrations should be NIST traceable.
7.	Minimum Integration Speed/scanning time	≤ 100ms
8.	Wavelength Reproducibility	0.1 nm
9.	Wavelength Accuracy	< 2nm in entire range of wavelength
10.	Instrument Size	Should be handy while survey on boat
11.	Weight including instrument, batteries and underwater accessories	Should not be very heavy, around 18 kg (max.)

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12.	Noise Equivalent Radiance	Should be $\leq 1.8 \times 10^{-9}$ W/cm ² /nm/sr in entire range of wavelength
13.	Essential underwater/spectroradiometer Accessories	(i) Instrument should be capable of taking reading underwater up to at least 30 m depth, it should come with all underwater required accessories. The accessories must be water tight. (ii) Underwater optical cable for measuring underwater spectra from at least 4 m depth
14.	Working Conditions	(i) It should be rugged enough to work in temperature from -10° to + 50° C. (ii) Underwater
15.	FOV	1- 4 deg FOV fore optic along with its calibration.
16.	Fiber optic light guide	Between 1 - 2 m long Fiber optic light guide with 25 deg FOV along with calibration of 25 deg FOV. The instrument should have facility to change the fibre optic light guide in field.
17.	Reflectance Spectralon Panel/White reference plate	Well calibrated Reflectance Spectralon Panel/White reference plate (10"x10" & 5"x 5" size) with hard case
18.	Windows based data acquisition software should be provided to analyse the spectra/Post processing software for following:	<ul style="list-style-type: none"> • Data import & export in ascii, text, .sli etc. format • Radiance to reflectance calculation etc. (on the instrument or during post processing) • Spectro-radiometer calibration details & procedure
19.	Batteries	(i) Endurance of battery should be around 8 hours. (ii) Batteries should be rechargeable (iii) Batteries should be rugged enough to work underwater. (iv) Battery charger to charge the batteries.
20.	Laser pointer	Laser pointer to target object through spectroradiometer under FOV
21.	Carry bag/box to keep the instrument safe	Should have rugged (i) carrying bag to carry the instrument in field (ii) hard material box to keep the instrument safe
22.	Digital Camera	Internal digital camera captures scene of target area
23.	Should have facility to integrate - Integrating spheres ideal reflectance measurements and its calibrations	
24.	Should have facility to integrate – Cosine Corrector	
25.	Set-up and warm-up time should be less.	
26.	Facility to store the spectra (at least 1000 Scans) in internal memory. Must have compatible and tough/rugged personal digital assistant (PDA) for on-field display of spectra. Screen should be sunlight readable with background light and standard size. OR compatible rugged laptop or tough book.	
27.	Internal/External GPS receiver to provide the time and location coordinates for each data file. It should be from standard company/make. It should have windows operating system.	

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28.	Should have Bluetooth, USB and other ports for transferring the data from instrument to computer	
29.	Inbuilt Touch Screen to view the data on the field	
30.	Optional Items	<ul style="list-style-type: none"> (i) 8 deg and 14 deg standard FOV with their calibration compatible with the instrument may be provided. (ii) Additional batteries compatible with the instrument (iii) contact and leaf probe compatible with the instrument may be provided
31.	Instrument and its accessories should have at least 1 year warranty. Vendor may also additionally/optionally provide the quote for extended warranty, if possible.	

R. Kelton