

NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR – 492 010, CHHATTISGARH

Single Tender Enquiry

Department: Electronics and Communications Engineering Department

Enquiry No: NITRR/S & P/Prop/ECE/2024-25/27/1057

Date: 07/10/2024

To,

M/s Techno Scientific Company, 102/7, Shreyas, P.B. Sule Marg, Wadala, Mumbai-400031

Dear Sir,

We intend to purchase the commodities specified in this document and invite quotations in accordance with the terms and conditions detailed in the bid document. If you are interested, kindly send your offer with prices and complete terms within the time mentioned above.

Please send your quotation to:

REGISTRAR NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR G. E. ROAD, RAIPUR – 492 010, CHHATTISGARH

Yours sincerely,

Sd/-

Registrar National Institute of Technology, Raipur

Enclosed:

- (1) Name and specification of the Item.- Annexure 1
- (2) Special Terms & Condition (Optional) Annexure 2
- (3) General terms and conditions Annexure 3
- (4) Price Bid Format in INR Annexure 4
- (5) Price Bid Format in of imported items in currency other than INR -Annexure 5

(Annexure 1)

Technical Specifications of Light Runner Premium

TENDER SPECIFICATION

1. Equipment should be Compact & Portable standalone with capability to perform belowexperiments.

	LIGHT RUNNER - PRA					
	Fiber Characteristics					
1	Numerical Aperture					
2	Modes in Optical Fiber					
3	Attenuation in Optical Fiber					
4	Bending Loss in Optical Fiber					
5	Dispersion in Optical Fiber					
	Component Characteristics					
6	Characterization of LASER Diode					
7	Characterization of Photodetector					
8	Characterization of WDM Mux and Demux					
9	Characterization of FBG and Circulator					
10	Characterization of Erbium Doped Fiber Amplifier					
-	Optical Communication System					
11	Analog and Digital Fiber Optic Links					
12	Time Division Multiplexing of Digital Signals					
13	WDM Fiber Optic Link					
14	Optical Amplification in a WDM Link					
15	Adding and Dropping of Optical Channels in a WDM Link					
	Testing & Analysis					
16	Optical Time Domain Reflectometer					
17	Bit Error Rate & Eye Pattern Analysis					
18	Power Budgeting of an Optical Fiber Link					
19	Rise Time Budgeting of an Optical Fiber Link					

- Equipment should have Integrated LCD, Touch Screen facility, GUI Software & inbuilt User manual (Help) to control & perform experiments.
- Interactive Software Control should provide adequate information about how-to-do and what-to-expect for each experiment.

- Equipment should have cutting edge technologies like EDFA, OTDR, and OADM.
- 5. Equipment should provide exposure to concepts of OTDR and Eye Pattern Analysis.
- 6. Equipment should have built in Oscilloscope.
- All the necessary accessories to carry out the experiments (such as Laser Sources, DSO, Power Meter, Fiber Spools etc.) should be supplied along with it.

Technical Specifications:

LASERS: 1510, 1530, 1550 and 1570 nm

- Pigtailed DFB Laser
- Output Power 1mW
- Spectral width 50 pm

980 nm Laser

- Pigtailed Laser
- Output Power 40-50 mW

850 nm Laser

- Pigtailed Laser
- Output Power 2 mW

InGaAs & Silicon Photodiodes

- Pigtailed Photodiodes
- High Speed PIN diodes

Variable Optical Attenuator

- Attenuation Range 1 40 dB
- Resolution 0.5 dB

3 Port Circulator

- Isolation 15 dB
- Insertion Loss 0.5 -1 dB

3 dB Coupler

Splitting Ratio 50:50

Insertion Loss of each Channel 1 dB

4 Channel WDM Mux & DeMux

Pass Channels at 1510, 1530, 1550 and 1570 nm

Channel spacing 20 nm

980/15xx Mux

- 30 dB isolation @ 1550 nm
- 15 dB isolation @ 980 nm

Fiber Bragg Grating

30 dB isolation @ 1550 nm

List of accessories:

- Digital Multimeter
- Head Phone
- · Microphone
- · Power Meter
- Single Mode Fiber Spool 1KM,2KM,3KM
- Mains Power Cable
- BNC cables
- RS 232 (DB9) Cable Female-Female
- FC-FC SM fiber patch Cords
- FC-FC Adaptor
- Mandrel
- Visual Fault locator
- Dispenser Bottle
- Tissue Papers
- Cleaning Sticks
- Connector Cleaning Spray

(Annexure2)

Special Terms and Conditions

Nil

Annexure 3

General Terms & conditions

Instructions to the bidder

- The bid should remain valid for a period of 60 days. In case your offer has a different validity period that should be clearly mentioned in the quotation.
 Validity period may also be extended without change in bid prices, if required on mutually agreed basis only.
- 2. Excise Duty: The Institute have the Excise Duty exemption certificate.
- 3. Custom Duty: Institute have the custom duty exemption certificate.
- 4. Entry Tax: The State of Chhattisgarh charges entry tax on all goods entering the State. Please include it in your quotation as a separate item. Entry Tax will be reimbursed on production of proof of payment.
- Please address your quotation with all the required documents to "Registrar, NIT RAIPUR (C.G) 492010" and super scribe the envelope "Quotation for the Department of Electronics and Communications Engineering" Bid may also be sent to through e-mail on or before 30/10/2024.
- 6. The bidders should quote their offer/rates in clear terms without ambiguity in attached **Annexure 4 or 5 only**.
- 7. Technical brochure/catalogue should also be enclosed to support the specification of the items issued by OEM.
- 8. **Warranty Period:** The warranty period should be minimum 1 year (with spares) until and unless specified differently from the date of installation. For standard items which carry warranty of more than one year, standard warranty shall be applicable.
- 9. The successful bidder has to furnish "Performance Security of 03% of the ordered value", in the form of Account Payee Demand Draft, / Fixed deposit and/or unconditional Bank guarantee en-cashable on demand from the Director, NIT, Raipur, from a nationalized Bank with validity period of sixty days beyond the date of completion of all contractual obligations of supplier including guarantee/ warranty obligations. The Performance Security is to be furnished in favour of the Director, National Institute of Technology, Raipur. Payment will be processed only after receipt of the Performance Security.

10. **Terms of Payment:** The method and conditions of payment to be made to theSupplier under this Contract shall be as follows:

Payment for Goods and Services offered from India/aboard in INR: Payment shall normally be made in Indian Rupees, as follows: 100% payment will be made in account payee cheque or Draft / online Transfer using RTGS to the Supplier within ten (10) days after the successful installation and commissioning of equipments subject to submission of performance security.

Payment for Goods and services offered from abroad in foreign currency:

Payment of foreign currency portion shall normally be made in the currency of contract in the following manner:

On Shipment: Ninety (90) percent of the Contract Price of the Goods shipped shall be paid through irrevocable letter of credit opened in favour of the Supplier in a bank in its country, upon submission of following documents specified as below. Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/ courier and copies thereof by FAX.

- a) Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.;
- b) Packing list;
- c) Certificate of country of origin;
- d) Manufacturer's guarantee and Inspection certificate/test report;
- e) Inspection certificate issued by the Purchaser's Inspector, if any.
- f) Insurance Certificate, if required under the contract;
- g) Name of the Vessel/Carrier;
- h) Bill of Lading/Airway Bill;
- i) Port of Loading;
- j) Date of Shipment;
- k) Port of Discharge & expected date of arrival of goods.
- 1) H S code of classification of goods.
- m) Any other document(s) as and when required in terms of the contract.

Note:

- The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)
- 2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.

On Acceptance: Ten (10) percent of the Contract Price of Goods received shall be paid normally within thirty (30) days of receipt of the Goods and successful

installation & commissioning upon submission of claim supported by the acceptance certificate issued by the Purchaser along with the Performance security.

The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. All bank charges in India to the account of the opener and all bank charges outside India to the account of the beneficiary. Payment of local currency portion shall be made in Indian Rupees normally within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The LC for 100% value of the contract shall be established after deducting the agency commission payable, if any to the Indian agent from the CIF value.

- 11. **Delivery period:** Delivery should be made within 150 days from the date of order of placement of goods offered from India or opening of the LC in case of goods offered from abroad. However early delivery shall be appreciated.
- 12. Any disputes arising out of this enquiry shall be dealt in the Raipur jurisdiction.
- 13. Bidder need to submit the following certificates along with the quotation :
 - Proof of establishment of Firms/shop/business/ manufacturing unit etc. and Dealership certificate from the principals etc.
 - Proof of **GST** registration as per applicability.
 - Photocopies of the latest purchase orders received from IITs/NITs/any central govt. organization/State Govt. Organization/reputed private sectororganization for the offered item.
 - Authorization certificate from Principal
 - \circ Propriety Certificate stating that they are the only source of supply/ Manufacturer.
 - Proof of PAN
 - User list IITs/NITs/Central govt. organization/ State Govt /reputed private sector Organization for the offered item.
 - Any other relevant document, if any

14. Clearance & delivery

On arrival of shipment/consignment, the supplier is required to arrange custom clearance and transportation of the consignment up to NIT RAIPUR premises. The expenses incurred will be reimbursed on actual basis not exceeding the quoted amount. The custom duty, demurrage (in case of delay in release of custom duty tothe custom department by NIT Raipur) and government taxes/levies (if any) will be paid extra by the buyer after as per term of payment. Please note that the State of Chhattisgarh may charge entry tax on all goods entering the State. This may be included in your quotation as a separate item. Entry Tax will be reimbursed onproduction of proof of payment. Principals will themselves have to procure anyrequisite permission from the Govt. of country of origin of equipment.

15. Agency Commission/other charges

Agency commission or other charges, if any should be clearly mentioned by the Bidder and will be paid in Indian Currency. Please note that actual reimbursement will not exceed the quoted amount in any circumstances.

> Sd/-Registrar

NIT-Raipur

Department: Electronics and Communications Engineering

Annexure-4

Price Schedule form: Price Schedule for Goods Being Offered from India/Abroad in INR (Separate form to be used for each item offered)

Name of the Bidder:

Name & Model No. of offered item:

Tender Enquiry No.:

Sr.		Price per		
No.		Unit in INR		
1.	Ex-works, Ex-wareh			
2.	Custom Duty** pay			
3.	Excise duty** payab			
4.	GST taxes mentioned as under:			
	TAXES	GST Percentage	Amount	
4.	CGST			
	SGST			
	IGST			
5.	Any other tax & du			
6.	Packing & forwardin			
	Charges for inland transportation, insurance to ultimate destination			
7.	i.e. NIT, Raipur, if any			
8.	Installation, Commis			
9.	Any other charges			
Total		o. 1 to 9) FOR NIT RA	IPUR	

** NIT Raipur have custom Duty/excises Duty exemption certificate.

Total Bid price in Indian currency: -----

Bid Price In words:

Note: The cost of optional items may be indicated separately.

Seal & Signature of Bidder

Annexure-5

 Price Schedule Form:
 Price schedule for goods being offered from abroad in currency other than INR

(Separate form to be used for each item offered)

Name of the Bidder:

Name & Model No of offered item:

Tender Enquiry No.:

Sr.	Details			Price per unit in ()
No					
1.	Country of origin	ı			
2.	FOB (named por	t of shipment)			
	Or	-			
	FCA (named pla	ce of delivery)			
3.	Freight and Insu	ance up to Indian			
4.	Total Price at Inc	lian Airport /port (
5.	**Custom charge	es /Duty (please me			
6.	GST taxes ment	ioned as under:			
	TAXES	GST Percentage	Amount		
	CGST				
	SGST				
	IGST				
7.	Custom clearance and other charges if any (with				
	breakup)				
8.	Inland Charges f	or Insurance & trar			
	Raipur				
9.	Installation, com	missioning and trai			
	any				
10.		ges (Please Specify			
11.	Total Price (FOR	- ·			
	(a) in foreign cur	rency:			
	(b) In INR				
	(Sum of Sr. No.	,			
	Tota	al Charges in INR			

** NIT Raipur have custom Duty /excises Duty exemption certificate.

Total Bid price in foreign currency: -----

Total Bid Price in Foreign currency words: _____

(a) Indian agents name & address

(b) The cost of optional items shall be indicated separately------

(c) Cost/Charges in INR wherever applicable should be mentioned separately

Seal & Signature of Bidder