



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : drps@ismdhanbad.ac.in || Website : www.iitism.ac.in

No. TEQIP-PRJ-297-18-19

Date: 15.01.2018

NOTICE INVITING TENDER

Subject: Invitation for quotations for supply of Goods.

Indian Institute of Technology (Indian School of Mines),Dhanbad invites quotations for the following to be supplied and delivered in Electronics Engineering Department.

S No	Description of items/ store	Qty	Delivery
1	Supply & Installation of Goods as per Annexure-I	As per Annexure - I	At the Earliest

Tender Schedule

Particulars	Date & Time
Last date and time for submission of tenders	07.02.2019 at 1:00 P.M.
Date and time of opening of tenders	07.02.2019 at 4.00 P.M.

1. You are requested to quote your lowest rates for the supply of above items in the attached format for Financial Bid (Annexure - II), **L1 will be decided on overall price basis.**
2. You may send your representative in the office of the undersigned at the scheduled date and time of opening of tender.
3. Tender should be submitted in sealed cover only super scribed with Enquiry No. and Due date at the following address only:

*The Assistant Registrar (P&S)
Indian Institute of Technology (Indian School of Mines),
Dhanbad - 826 004 Jharkhand*



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Annexure - I

S.No	Name of Material	specifications	Qty
1.	Connector	Connector: FC/APC Insertion Loss(Typical): ≤ 0.3 dB Return Loss: ≥ 40 dB Operating wavelength: 1310,1550 nm	10
2.	Optical Isolator 1550 nm (SM)	Optical Isolator 1550 nm (SMF) Bandwidth: ± 20 nm Typical peak Isolation= 42 dB Minimum Isolation= 32 dB Insertion Loss: 0.5 dB (Max) Return Loss ($> 65/60$ dB) PDL: < 0.05 dB PMD: 0.2 ps Maximum power Handling: 0.3 watt	2
3.	Optical Light Source (Laser)	Optical Light Source (Laser) connector : FC/APC, wavelength: 1550 nm Optical Linewidth: ≤ 3 MHz Sideband Suppression ratio: ≥ 50 dB Output Power: Max 2mW Power Supply compatible with the device. Communication interface : DB9 (RS232) or better	2
4.	Optical Power meter	Wavelength (nm) 800~1700 Detector In GaAs Measurement Range (dBm) -70~+3 Uncertainty $\pm 5\%$ Calibrated Wavelength (nm) 850, 980, 1300, 1310, 1490, 1550 Resolution (dB) 0.01 Optical Connector FC(interchangeable SC,ST) /as well as 2.5mm universal Power Supply Alkaline Battery Battery Operating Time 240h with 1.5V battery Operating Temp. (°C) -10~+60 Storage Temp. (°C) -25~+70 Relative Humidity 0~95% non-condensation Dimension (mm) 175x82x33 Weight (g) 310	2
5.	Optical splitter	Coupling Ratio: 50:50 Center Wavelength: 1550 nm Minimum Bandwidth: ± 15 nm (Min) Insertion Loss: ≤ 3.6 dB/ ≤ 3.6 dB Excess Loss: ≤ 0.15 dB Uniformity: ≤ 0.5 dB Polarization-Dependent Loss (PDL): ≤ 0.15 dB Optical Return Loss (ORL) / Directivity: ≥ 60 dB Max Power Level: 1 W (With Connectors or Bare Fiber) 5 W (Spliced) Fiber Type: SMF-28e+ Fiber Lead Length and Tolerance: 1.0 m ± 0.075 m/ ± 0.0 m Connectors: 2.0 mm Narrow Key FC/APC Operating Temperature Range: -40 to 85 °C Storage Temperature Range: -40 to 85 °C	2
6.	Optical Time Domain Reflectometer	Display: 7-in (178-mm) outdoor-enhanced touchscreen, 800 x 480 TFT Interfaces: Two USB 2.0 ports RJ45 LAN 10/100 Mbit/s Storage: 2 GB internal memory (20 000 OTDR traces, typical) Batteries: Rechargeable lithium-polymer battery 12 hours of operation as per Telcordia (Bellcore) TR-NWT-001138 Power supply : Power supply AC/DC adapter, input 100-240 VAC, 50-60 Hz, 9-16 V DCIN 15 Watts minimum Wavelength (nm): 1550 $\pm$ 30 Isolation : > 50 dB from 1270 nm to 1585 nm Dynamic range (dB) : 30 Event dead zone (m): 1 Attenuation dead zone (m) 4 Distance range (km): 0.1 to 160 Pulse width (ns): 5 to 20000 Sampling resolution (m) :0.04 to 5 Sampling points Up to: 256000	1

-50~+26



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		Measurement time : User-defined (maximum: 60 minutes)	
7.	Broad band source	Wavelength Range: 450 – 5500 nm Peak Wavelength: 1500 nm Color Temperature: 1900 K Color Temperature Stability: ± 15 K Bulb Power: 7.2 W Fiber Coupled Output Power (Typical): 2 mW Collimated Output Power (Typical): 15 mW Output Power Drift per Hour (Typical): 0.01% Optical Power Drift per °C (Typical) 0.1% Output Power Stability: < 0.05% Power Supply: 90 – 264 VAC, 47 – 63 Hz Operating Temperature: 0 – 45 °C Storage Temperature : 15 – 70 °C Fiber coupled connection: FC/APC	1
8.	Optical circulator (FC/APC)	Central Wavelength: 1550nm Bandwidth : ± 20 nm Insertion Loss: ≤ 0.8 dB Isolation : ≥ 20 dB (40 dB peak isolation) Extinction Ratio: ≥ 20 dB Directivity : ≥ 50 dB Return Loss : ≥ 50 dB Polarization Alignment: slow axis Maximum Power : 300 mW PDL : ≤ 0.2 dB Operating Temperature : 0° C ~ + 70° C	1
9.	PIN Photodetector (5GHz)	Wavelength Range 800 - 1700 nm Bandwidth (-3 dB) 5 GHz Fiber Input FC/PC Signal Output SMA Minimum Resistor Load 50 Ω Maximum Peak Power 100 mW Output Voltage 2 V (Max) Rise Time (t) <70 ps @ 1538 nm, 20/80% Fall Time (t) <70 ps @ 1538 nm, 80/20% NEP (Maximum) 2×10^{-15} W/ $\sqrt{\text{Hz}}$ (@ 1550 nm) Junction Capacitance 0.3 pF	1
10.	PIN Photodetector (1.2 GHz)	Wavelength Range 800 - 1700 nm Material InGaAs Bandwidth (-3 dB) 1.2 GHz Fiber Input FC/PC Signal Output SMA Minimum Resistor Load 50 Ω Maximum Peak Power 70 mW Saturation Power (CW) 5.5 mW (1550 nm) Output Voltage 0 to 3.5V((50 Ω) ; 0 to 10V(Hi-Z) Bias Voltage 12 V Dark Current 0.235 nA NEP (Maximum) 4.5×10^{-15} W/ $\sqrt{\text{Hz}}$ (@ 1550 nm) Junction Capacitance 2.4 pF (Typical)	1
11.	Spool of 25 Km single mode fiber with FC/AC Connector	Spool of 25 Km single mode fiber with FC/APC Connector 1310/1550 nm, loss less than 0.2 dBm	1
12.	Uniform Fiber Bragg Gratings	Uniform Fiber Bragg Gratings , Central wavelength: 1550 nm FBG Profile: Apodized Wavelength tolerance: ± 0.5 FBG length: 10mm Reflectivity: $\geq 90\%$ Bandwidth: ≤ 0.3 nm Fiber termination : FC/APC	2



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Terms & Conditions

- 1) Price should be in F.O.R. IIT(ISM), Dhanbad basis only.
- 2) The rates should be quoted for each item separately.
- 3) Conditional offer will not be accepted.
- 4) *Educational discount*, if any, should be clearly mentioned.
- 5) Please mention after sales service information in your offer.
- 6) **Please attach a certificate that the quoted price is not more than that of any other Govt. organization/ institution in India. This has to be mentioned in the offer letter clearly.**
- 7) The rates should be quoted for each item separately.
- 8) Quotation,
 - i) The contract shall be for the full quantity as described above.
 - ii) Corrections, if any, shall be made by crossing out, initialling, dating and re writing.
 - iii) All duties and other levies payable by the supplier under the contract shall be included in the unit price.
 - iv) Applicable taxes shall be quoted separately for all items.
 - v) The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be Subject to adjustment on any account.
 - vi) The Prices should be quoted in Indian Rupees only.
- 9) Each bidder shall submit only one quotation.
- 10) Rates quoted will be taken as inclusive of all taxes unless given separately. IIT (ISM) does not issue any Form 'C' or 'D' towards sales tax concessional rate. Hence, full rate of sales tax/ VAT, GST applicable should be quoted.
- 11) You are requested to submit your quotation strictly as per the specifications mentioned in the NIT.
- 12) Your tender must be valid for **minimum 60 days** from the date of opening of tender.
- 13) Please mention warranty/ guarantee in your offer clearly. Material/ equipment to be supplied must have minimum warranty/ guarantee of **12 months** from the date of installation, if applicable.
- 14) **Performance Bank Guarantee:** Performance Security has to be submitted from the successful bidder. A bank guarantee issued by a Nationalized Bank in India towards PBG for an amount equal to 10% of total order value of purchase order and valid till the period of beyond the two months of completion of warranty period should be submitted in favor of Registrar, IIT(ISM) Dhanbad. In case the contractor fails to provide satisfactory service, the Performance Security submitted by the bidder(s) is liable to be forfeited. An undertaking to this is to be submitted. An undertaking to this is to be submitted.
- 15) Each page in the bid document must be numbered properly and duly signed & sealed by the bidder on every page of the bid.
- 16) *The items/ materials shall be required to be delivered at Electronics Engineering, Department/ Section IIT (ISM) Dhanbad at the risk and cost of the tenderer.*
- 17) Unloading and installation shall be the complete responsibility of the supplier.
- 18) The stores are required to be preferably delivered within 30 days. Late delivery may not be accepted.
- 19) The items offered should be of good quality confirming to BIS standards, wherever applicable.
- 20) **Advance payment or part payment or part shipment is not admissible.** Payment shall normally be made within 4-6 weeks subject to receipt and acceptance & installation (as per Purchase Order Terms) of the ordered materials/items and submission of original bills/invoice, challan, installation report, warranty certificate etc, and PBG followed by it confirmation.
- 21) In the event date on which the tender is opened for acceptance is declared to be a holiday, the tenders shall be deemed to remain open for acceptance till the next working day. IIT(ISM) reserves right to extend the date & time of submission/opening of the quotations.
- 22) Please send your offer by Regd.Post/ Speed Post/ Courier along with Courier receipt. Tender/ quotation will be received during IIT (ISM) working hours only (i.e. Monday to Friday). **At any circumstance by hand delivery is not acceptable.** Late or delayed tenders shall be summarily rejected.
- 23) Any other information that you may like to obtain, you are free to contact IIT (ISM) before submission of tender.
- 24) IIT (ISM) reserves the right to accept and/or to reject any/ all tenders without assigning any reason.

Assistant Registrar



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Annexure -II

2. PRICE SCHEDULE FOR GOODS BEING OFFERED WITHIN INDIA

Name of the Bidder_____

NIT Reference No. _____

File Reference No. _____

Sl. No.	Full Description of items with (HSN Code/SAC Code)	Quantity	Unit Price (in INR)	Total Amount (in INR)
1.				
2.				
3.				
Ex-Works Price-				
Packing & Forwarding				
Transportation				
FOR (IIT ISM) Dhanbad				
<u>GST/IGST (their rate(s) as the case may be, clearly specified)</u> Please note that IIT ISM is eligible for Concessional GST as per Notification No. 45/2017-Central Tax (Rate) for CGST, 45/2017-State Tax (Rate) for SGST and 47/2017-Central Tax (Rate) for IGST,				
Insurance up to Destination/handover (in case of fabrication)				
Installation & Commissioning charge				
Training charges, if any				
Additional Warranty Charges, if any				
Annual Maintenance Charge, if any				

*(On the basis of the technical specifications submitted)

Total Bid Price_____

in words_____

Note :

(a) The Price schedule of optional items shall be indicated in a separate sheet in the same Performa.

(b) Cost spare parts may be indicated separately

Signature of Bidder

Name _____

Business

Address_____