

## NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI, TAMIL NADU – 620 015

# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING TENDER FOR PROCUREMENT OF DRF1278F 433MHz RF module

**BID SYNOPSIS** 

Tender Reference Number and Date	NITT/EEE/DST/SERB/SPS/Purchase/2016/01 dt:01-03-2016					
Brief Description of the item to be	DRF1278F is a type of low cost RF front-end transceiver module					
purchased	based on SX1278 from Semtech Corporation					
Type of Tender	Two Bid System					
Cost of Tender Document including 5%	Rs.150/- (Rupees One Hundred and Fifty only) payable through					
VAT (Non- refundable)	Demand Draft drawn in favour of The Director, NIT, Tiruchirappalli,					
	Tamil Nadu Payable at Tiruchirappalli					
Our web site address for downloading	The tender document can be downloaded from our website					
the Tender document	www.nitt.edu					
Earnest Money Deposit (Refundable)	Rs.8,000/-(Rupees Eight Thousand only) payable through Demand					
	Draft drawn in favour of The Director, Tiruchirappalli, Tamil Nadu					
	Payable at Tiruchirappalli					
Last Date and Time for receipt of tender	18-03-2016 up to 3:00 pm					
Mode of submission of Tender	By Speed Post/ Register Post/ Courier/ Hand delivery at the postal					
	dispatch section of NITT at the Administrative building.					
Date, time & venue Opening of Tender	19-03-2016 at 3:00 pm					
Date and time of opening of Price bids	After evaluation of technical bids, the date, time and place of opening					
	of the Price bid will be intimated to technically qualified bidders.					
Address for submission of Tender With a	The Director, National Institute of Technology, Tiruchirappalli-15,					
Superscription	Tamil Nadu, India With a Kind attention to:					
	Dr.Sishaj P Simon,					
	PI, Assistant Professor,					
	Department Of Electrical And Electronics Engineering					
Procedure for submission of Bid	Envelope 1: EMD and Cost of Tender document					
	Envelope 2 : Technical Bid					
	Envelope 3: Price bid					
	Envelope4: Larger size Outer Envelope (Wrapper)					
Contact Person for technical queries	Dr.Sishaj P Simon					
	PI, Assistant Professor					
	Department Of Electrical And Electronics Engineering					
	0431 - 2503265 (Land Line), 09486001142 (Mobile)					
	sishajpsimon@nitt.edu					

#### NOTICE INVITING TENDER

Sir, National Institute of Technology, Tiruchirappalli, Tamil Nadu (herein after referred to as NITT) is an Educational Institution of National Importance, invites sealed tenders from reputed Original Equipment Manufacturers or their authorized agents/ dealers/ distributors/channel partners for (a) supply of the following goods/ materials/ items or (b) Supply, Installation and Commissioning of the following equipment, (strike out whichever is not applicable) as per the detailed technical specification given in Chapter Number 4.

## CHAPTER 1: GENERAL INSTRUCTIONS TO THE BIDDERS

1. The tender document and terms and conditions can be downloaded from our website <u>www.nitt.edu</u>.

2. <u>EMD amount and Tender application Fee</u>: Through two separate Demand Drafts, the bidder is required to furnish Earnest Money Deposit Rupees (8,000/-) and (Rupees Eight Thousand only) and

Cost of Tender Document (150/-) and (Rupees One Hundred and Fifty only)

3. Without EMD and Cost of Tender Document, the technical bid will not be opened and the tender will be rejected summarily.

4. Due date and Time: The sealed tender should be submitted on or before 18-03-2016 up to 3.00 P.M., through post or hand delivery and addressed to the Director, National Institute of Technology, Thuvakkudi, Tiruchirappalli-15, Tamil Nadu, India. Quotations/ bids received after deadline will be rejected summarily.

5. **Tender Opening:** While tender opening, at the first stage, the envelope containing EMD amount and Cost of Tender document will be opened and at the Second Stage the envelope containing Technical Bid will be opened on **19-03-2016 at 3.00 P.M** in the presence of the bidders or their authorized representatives, who choose to be present at the time of opening. The name of those who have submitted their offers along with the details of their remittance of EMD and Cost of Tender Document will only be read out and no other information/ details whatsoever will be shared at this stage.

6. If in any case, unscheduled holiday occurs on prescribed closing/ opening date, the next working day shall be the prescribed date of closing/ opening.

7. At the third stage, price bid of the technically acceptable offers will be opened for further evaluation and ranking for award of the contract/ purchase order.

8. The bidders are advised to go through the tender documents and understand the terms and conditions specified therein before submitting the tender.

9. Prescribed Format: The Tender document consisting of Technical Bid (along with all annexures to the technical bid) and Price Bid should be submitted in the Prescribed Format only.

10. The bidders are not allowed to make addition or alteration in the tender document.

11. Each and every page of the submitted bid shall carry the page numbers. The Vendor should stamp and sign on each page of the technical and price bid.

12. All pages of the tender document shall be signed by the person or persons duly authorized to sign, on behalf of the bidder.

13. No paper / page shall be detached from the tender document. No addition or alternation should be made in the tender document.

14. Conditional tender, late and delayed tender will not be accepted/ considered.

15. The NITT shall not be responsible for any postal delay in receipt of the offer. Tender should be properly sealed.

16. The NITT will not be responsible for pre mature opening of the tenders.

17. The offers submitted by telex/ telegram/ fax/ E-mail etc. shall not be accepted and will be summarily rejected.

19. Offers should be clearly written or typed without any cutting or over writing. All cutting / over writing must be initialed and stamped.

20. Bidders must confirm the acceptance of all the terms and conditions of the tender.

21. Making misleading or false representation in the bid document will lead to disqualification of the bidder resulting in forfeiture of EMD amount.

22. The tender should be submitted through Registered Post or Speed Post or through Hand delivery.

23. Any non-acceptance or deviations from the terms and conditions must be CLEARLY mentioned. However, bidder must note

that any conditional offer or any deviation from the terms and conditions of this tender may render the bids liable for rejection. 24. Furnishing of any false information/ fabricated document would lead to rejection of tender at any stage.

## 24. Earnest Money Deposit (EMD):

- a. The quotation must be accompanied by Earnest Money Deposit (EMD). Tenders without EMD will be not be entertained.
- b. The above requirement, however, will not apply to bidders who are registered with the National Small Industries Corporation (NSIC). But, for claiming this exemption under NSIC registration, the bidders MUST furnish an self-attested copy of the exemption certificate indicating Date of registration, date till registration is valid, whether registered for items for which tender has been submitted.
- c. The EMD shall be in the form of Demand Draft drawn from any of the Nationalized Bank/ Scheduled Commercial Bank drawn in favour of the Director, NIT, Tiruchy, payable at Tiruchy. The bid security should be valid for 90 days. If the EMD is not found valid in terms of amount wise, period wise or otherwise, technical bid of the bidder shall not be opened.
- d. Earnest Money is liable to be forfeited and bid is liable to be rejected, if the tendered withdraw or amends / impairs or derogates from the tender in any respect.
- e. The EMD of the technically disqualified bidders will be returned within 21 days from the date of opening of the technical bids.
- f. The EMD of those bidders who are successful in technical bid but unsuccessful in the financial/ price bid shall be refunded within 14 days from the date of opening of financial/ price bid.
- g. The EMD of the successful bidders shall be refunded on receipt of Performance Bank Guarantee.
- h. No interest will be payable by the NITT on the Earnest Money Deposit.

# **CHAPTER 2: SPECIAL INSTRUCTIONS TO THE BIDDERS**

Procedure for Sealing and Marking of bids: The Tender / Bid Cover shall contain the following:

- a) **FIRST** envelope should contain the <u>Earnest Money Deposit and Cost of Tender Document</u>. The envelope should be sealed and super scribed as "EMD COVER"
- b) **SECOND** envelope should contain the <u>Technical Bid</u> along with enclosures desired in the Tender document. This envelope should be sealed and super scribed as "TECHNICAL BID" Cover.
- c) **THIRD** envelope should contain the <u>Price Bid</u>. This envelope should be sealed and super scribed as "PRICE BID" Cover.
- d) All the above mentioned THREE SEPARATE ENVELOPS are to be sealed and kept in one single Larger size outer envelope (FOURTH envelope) which should also be sealed and super scribed.
- e) Each of the FOUR ENVELOPS shall be super scribed with following details:

Tender/ Notice inviting Quotation Number	for supply of
· · ·	and time
<b>3</b>	

- f) If all the THREE inner envelops and the ONE outer envelope (i.e., larger envelope) are not sealed and marked as instructed, NITT will assume no responsibility for the misplacement or premature opening of any of the envelope. An envelope opened prematurely will be rejected.
- g) There shall NOT be any price indication in the technical bid. If for any reason, it is found that the technical bid reveals the price bid related details in any manner whatsoever, or, the price bid is enclosed in the envelope super scribed, "Technical Bid", the bid document will be summarily rejected in the first instance itself. Any offer containing both the Technical bid and Price bids in the same envelop will also be out rightly rejected.

## CHAPTER 3: TERMS AND CONDITIONS FOR PURCHASE

**This Institute:** The National Institute of Technology, Tiruchirappalli-15 is a Central Statutory Autonomous Body, functioning under the direct control of Ministry of Human Resources Development, Government of India. If the bidders have any special rates for the Government of India organizations/ academic institutions, they may quote those rates. If the bidders/ suppliers can supply goods on DGS&D rates that fact should be specifically mentioned in the quotation along with a copy of the DGS&D rate contract. However, no forms will be given in this regard by this Institute.

**Technical Specifications:** Specifications are basic essence of the product. It must be ensured that the offers are strictly as per our specifications. At the same time, it must also be kept in mind that merely copying our specifications in their quotation shall not make firms eligible for consideration. The quotations should contain information on make, model, manufacturer, number, country of origin etc., of the goods offered. A quotation has to be supported with the printed technical leaflet / brochure/ Templates and the specifications mentioned in the quotation must be reflected / supported by such printed technical leaflet / literature model quoted / tendered specifications should invariably be highlighted in the leaflet/ literature for easy reference.

**PRICE:** Price / Rates for Indigenous items must be quoted on **DOOR DELIVERY** Basis (i.e., FOR Destination basis). The price quoted shall be inclusive of all taxes, duties, levies, freight, transportation, insurance, loading and unloading etc. The NIT, Tiruchy will pay only for such goods as are actually received in Good condition and in accordance with the Purchase order.

**EXEMPTION FROM EXCISE DUTY AND CUSTOMS DUTY:** The NITT being a Research Oriented Higher Technical Institution is exempted from paying Central Excise Duty and eligible for Concessional Rate of Customs Duty. Wherever applicable, we will provide exemption certificate issued by Government of India to enable the vendor to clear the goods without payment of Excise Duty or Clearance of Imports at Concessional Rate of Customs Duty i.e., 5.15% (Basic Customs Duty, 2% Educational Cess on Basic Customs Duty, 1% Higher Education Cess on Education Cess).

**SALES TAX**: For Sales Tax Concession, NITT is not authorized to issue C or D Form Sales Tax Certificate. Hence, the bidder may claim Sales Tax at the Legally Leviable Rate. However, we request the bidder that Tamil Nadu VAT and Central Sales Tax may be charged at concessional rates, if any, applicable to Educational and Research Institutions run without profit motive, for which necessary End User Certificate will be issued at the time of retirement of document.

SERVICE TAX: Being an educational institution, NITT is exempted from payment of service tax in respect of following "services received" by NITT (a) Catering Services (b) Security Services (c) House Keeping Services (d) Transportation services and (e) Conduct of examination through outsourced agency. In respect of all other services received by it, NITT is liable to pay service tax.

VALIDITY OF THE OFFER: For Indigenous Purchase the offer should be valid for 90 days and for Foreign Purchase it should be valid for 120 days, from the date of submission of tender.

**WARRANTY:** The equipment must be warranted against all manufacturing defects for a minimum one year or as per standard warranty/ guarantee of the bidder, whichever is more from the date of satisfactory supply, installation and commissioning. If any defect develops during the warranty period due to faulty material, design workmanship etc., the supplier shall remedy the defects at their cost. They shall replace defective portions of the goods or replace the material / equipment as a whole, wherever necessary.

**POST WARRANTY:** in addition to quoting for the equipment, the bidder should quote for AMC charges for a minimum period of three years, Post Warranty period also. The tender will be evaluated, based on landed cost of the equipment and AMC charges for the post warranty (three years). However, work order for AMC during the post warranty period will be placed, only after the expiry of free warranty period.

**DELIVERY SCHEDULE**: Unless otherwise specified, delivery of goods at NITT will have to be made within 45 days from the date of receipt of the Purchase Order or as stipulated in the Purchase Order. The Institute reserves the right to cancel the order, if the supplier fails to adhere to the delivery schedule. Goods/ Material / Equipment should be door delivered at NIT, Tiruchy. Supplier shall be liable for all or any damage, loss or destruction to any goods or property resulting in improper packing or handling by Supplier.

**PAYMENT TERMS:** As a matter of Policy, No advance payment will be made. No part payment will be made. Bills will be paid by way of Account Payee Cheque/ NEFT/ RGTS transfer.

Payment terms for Indigenous Purchases	Payment terms for Foreign Purchases			
As per NITT's norm, advance payment is NOT allowed	(1) 100% payment shall be made by Wire / Telegraphic			
for indigenous purchases.	Transfer <u>after delivery and acceptance</u> subject to			
(1) For indigenous purchase of materials/ goods/	submission of Security Deposit of 10% in the form of			
<b>consumable items</b> , 100% payment will be made	Demand Draft / Bank Guarantee valid up to 2 months			
against delivery of items in good condition subject to	beyond Warranty Period. <b>OR</b>			
submission of Performance Bank Guarantee equivalent	(2) 100% payment shall be made by Irrevocable Letter of			
to 10% of the Purchase Order value (5% in the case of	Credit. Out of which 90% will be paid against submission			
order value less than one lakh).	of following documents (1) Airway bills – 2 copies (2)			
(2) For indigenous purchases of equipment/	Packing List – 2 copies (3) Invoice for shipping – 4 copies.			
machines/ apparatus/ non consumable items etc.,	Balance 10% will be paid after installation and satisfactory			
100% payment shall be made after delivery, successful	commissioning of item by purchaser subject to submission			
installation and commissioning subject to submission	of Security Deposit of 10% in the form of Demand Draft /			
of Security Deposit in the Performance Bank Guarantee	Bank Guarantee valid up to 2 months beyond Warranty			
equivalent to 5% to 10% in the form of Demand Draft/	Period. A condition to this effect will be incorporated in the			
Performance Bank Guarantee valid up to two months	Letter of Credit.			
beyond warranty period. The Performance bank	(3) Under exceptional circumstances, with the prior			
Guarantee should be furnished in the format	approval of the Competent Authorities, advance payment			
prescribed by the NITT.	in respect of Foreign Purchase Order value Not exceeding			
(3) Under exceptional circumstances, with the prior	10,000 US Dollars, may be allowed, subject to a			
approval of the Competent Authorities, advance	stipulation that the supplier should furnish BANK			
payment in respect of Purchase Order value Not	GUARANTEE in the prescribed format, for EQUIVALENT			
exceeding Rupees Six Lakh, may be allowed, subject to	AMOUNT, as a Surety Bond for the advance payment.			
a stipulation that the supplier should furnish BANK	Please note that 100% Bank Guarantee against advance			
GUARANTEE in the prescribed format, for EQUIVALENT	payment and 10% Performance Bank Guarantee against			
AMOUNT, as a Surety Bond for the advance payment.	Warranty Obligations are totally different from each			
Please note that 100% Bank Guarantee against	other.			
advance payment and 10% Performance Bank	Advance payment is not allowed in respect of any Foreign			
Guarantee against Warranty Obligations are totally	Purchase order, whose value is more than 10,000 USD.			
different from each other.				
IMPORTANT NOTE: THE BIDDERS/ TENDERERS WHO	ARE NOT AGREEING TO ABOVE PAYMENT TERMS, ARE			
ΠΕΛΙΤΕCΤΕΝ ΜΛΤ ΤΛ CLIDNAIT ΤΗΓΙΝ ΤΕΝΙΝΕΝ				

**REQUESTED NOT TO SUBMIT THEIR TENDER.** 

If the vendor fails to furnish the Performance Bank Guarantee, an amount equal to 10% of the Purchase Order value will be deducted from the final bill. e. Payment will be generally through Electronics Transfer of Funds (EFT) system for which the successful bidder has to furnish the following information: Name of the bank with branch where the accounts exist, Bank Account Number, IFSC Code etc.,

PERFORMANCE BANK GUARANTEE (PBG): 1. As Performance Security, the successful bidder shall furnish an unconditional Performance Bank Guarantee (PBG) from a Nationalized Bank or scheduled commercial bank for an amount equal to 10% of the Purchase order value and it should be kept valid for a period of 60 days beyond the completion of the Warranty Period. 2. The Performance Bank Guarantee (PBG), shall be furnished in the Format specified by NITT.

Liquidated Damages: If the successful bidder fails to perform the supply installation and commissioning, within the stipulated time then penalty at the rate of 1% per week subject to a maximum of 10% of the order value will be levied and deducted.

**Pre- installation**: Pre installation facilities required for installation may be intimated in the technical bid. Subsequently, before the consignment lands in NIT, Tiruchirappalli, the bidder shall confirm that the pre installation requirements are sufficient for installation of the equipment. In other words, the bidder should continuously monitor the pre installation requirements and see that everything is ready before the consignment is taken to the site for installation.

**Manuals:** The bidder/ tenderer should provide, free of cost, all original user's manuals, technical documents, operating manuals, installation manual, Service manual, Circuit Diagram, system toolkit, application notes, user guides, equipment CDs and DVDs, and all printed / electronic media/ drawings, data / calibration certificates that comes with the equipment / items. The supplier shall supply licensed versions of the equipment system. NITT is not responsible for any consequences arising out of patent right problems.

**Purchasers' Right**: Notwithstanding anything specified in this tender document, The Director, NITT, in his sole discretion, unconditionally and without assigning any reasons, reserve the rights (a) To accept or reject the lowest tender or any other tender or all the tenders, at any time prior to the award of the tender, without incurring any liability to the affected tenderer or tenderers (b) To accept any tender in full or in part (c) To reject the tender offer not confirming to the tender terms (d) To give purchase preference to Public Sector Undertaking wherever applicable as per Govt. Policy/ Guidelines.

No enquiry shall be made by the bidder(s) during the course of evaluation of the tender till final decision is conveyed to the successful bidder(s). However, the Purchase Committee or its authorized representative can make any enquiry/seek clarification from the bidders. In such a situation, the bidder shall extend full co-operation. Any effort by the bidder to influence the scrutiny / evaluation committee of NITT or any of its members in the processing of tenders or award decisions may result in the rejection of the tender.

**Interpretation**: Interpretation of the clauses in the tender document/ Contract document: In case of any ambiguity/ dispute in the interpretation of any of the clauses in this tender document, Director, NITT's interpretation of the clauses shall be final and binding on all parties.

**Arbitration**: Dispute, if any, arising out of the supply of the Items shall be settled by Arbitration by SOLE Arbitrator to be nominated by the Director, NITT as per the provisions of Indian Arbitration Act 1996. The Place of Arbitration shall be Tiruchirappalli, Tamil Nadu. The decision of the Arbitrator shall be final and binding on both the parties.

**Applicable law, Dispute and Jurisdiction**: The contract shall be governed by the laws and procedures established by Government of India. Any Dispute or difference whatsoever arising between the supplier and purchaser unless resolved amicably, **shall be settled by the Court of Law having Jurisdiction over Tiruchirappalli, Tamil Nadu.** 

Force Majeure: Any delay due to Force Majeure will not be attributable to the Vendor.

# CHAPTER 4: DETAILED TECHNICAL SPECIFICATIONS OF THE GOODS/ MATERIALS/ EQUIPMENT/ MECHINCAY PROPOSED TO BE PURCHASED THROUGH THIS TENDER

SI. No.	Name and Description of the item to be purchased and Detailed Technical Specifications	Quantity required
1.	Name of the component: DRF1278F 433MHz RF module	500
	Specification:	
	<ul> <li>SX1278 based (G)FSK/4(G)FSK/LoRa transceiver module</li> </ul>	
	433MHz transceiver	
	20dBm output power	
	<ul> <li>-136dBm sensitivity</li> </ul>	
	Standard SPI interface	
	127dB dynamic Range RSSI	
	Automatic RF sense and CAD monitor	
	Data Rate: <300 kbps	
	• Standby current: <1uA	
	• Supply voltage: 1.8-3.6V	

## CHAPTER 5: PROFORMA FOR TECHNICAL BID

	Item/ Requirement from the Bidder	Bidders Response should be definite,
	item, requirement from the blader	complete and legible
1	Details of remittance of Cost of Tender Document: (1) DD Number (2) Amount (3) Issuing banker	
2	Particulars of remittance of EMD: (1) DD Number (2) Amount (3) Issuing banker	
3	In case, the bidder claims exemption from EMD and tender fees, whether valid registration certificate with NSIC has been furnished? (Note: The validity of the NSIC certificate will be verified by NIT, T through online portal maintained by NSIC for verification)	
4	Name and Complete Postal address of the Applicant or Bidder with phone/ Fax/ mobile number	
5	Website Address of the Bidder firm / company (Optional)	
6	Legal Status/ Constitution of the Bidder: Sole Proprietor or Partnership or Private or Public Limited Company or Others (attach documentary proof)	
7	Classification of the bidder (a) Manufacturer or (b) Authorized Agent or (c) Authorized Dealer or (d) Stockiest	
8	Name, address, designation, phone, cell number and E Mail address of the Contract Person	
9	Income Tax Permanent Account Number (PAN Number) (Please Attach self-attested xerox copy)	
10	VAT/ TIN number (Please Attach self-attested xerox copy)	
11	Central Sales Tax (CST) Number (Please Attach self- attested xerox copy)	
12	Service Tax Registration Number (Please Attach self- attested xerox copy)	
13	If the bidder has already supplier SIMILAR item or similar equipment to NIT, Tiruchy the details of the same	
14	Whether you agreed to abide by the terms and conditions of the tender document? In the event of award of the contract, whether you agrees to give security deposit/ Performance Bank Guarantee against warranty obligations.	
		Authorized signatory of Bidder with Seal

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#### CHAPTER 6 : PRICE BID FORMAT FOR INDIGENOUS PURCHASES

Tender No. & Date:

Name of the Bidder:

S. No.	Description of the item to be procured	Unit	Quantity	Basic Price in Rupees (Excluding all taxes and duties)	Excise Duty %	VAT/ CST in %	Service Tax in %	Total Amount in Rupees (Inclusive of all taxes and duties)
1	Supply Portion/ Main item (under the letter head of the bidder Individual Item wise break price shall be attached as an Annexure to this price bid )							
2	Additional / Optional items/ Accessories and Spares etc., (Individual Item wise break price shall be attached as an Annexure to this price bid)							
3	Installation and Commissioning Charges, if any							
4.	Packing and Forwarding Charges, if any							
5.	Freight and Transit Insurance Charges, if any							
6.	Any other charges, i	Any other charges, if any						
7.	TOTAL ALL INCLUSIVE PRICE (Supplied or Supplied, installed and commissioned at NITT on door delivery basis. (i.e., F.O.R. Destination Basis)							

#### Authorized signatory of Bidder with Seal

Name..... Designation.....

Note 1: NITT is eligible for exemption from Excise Duty and Concessional Customs Duty. Please refer the tender document. As regards Service tax, As regards, sales tax NITT is not authorized to issue C or D forms for concessional VAT. However, it can issue end user certificate for claiming concessional VAT.

Note 2: Price bid Format should be supported with separate sheet duly typed and signed on the letter head of the bidding firm/ company indicating details i.e., different components/ parts/ units of the equipment (if any) with number, name and price of each part.

Note 3: DGS&D rate contract: If any of the items proposed to be procured under this tender is already under DGS&D (Director General of Supplies and Disposal) Rate Contract, the bidder may give us the advantage of rate contract rate, as ours is a premier educational and research institution sponsored by the Government.