

# Society for Electronic Transctions and Security (SETS), MGR Knowledge City, CIT Campus, Taramani, Chennai – 113.

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Ref.No. SETS/39/PUR/FY25-26/RF DAUGHTER BOARD

13-12-2025

#### **QUOTATION CALL NOTICE**

Sealed quotations are invited under the **Single Stage Two-Bid System** from **empaneled vendors with SETS** for the Procurement of the item mentioned below.

Last Date & Time for Submission of Quotation: 23.12.2025 at 13:00 PM

**Assistant (Purchase Officer)** 

#### **Addendum for Quotation Call Notice**

1	Quotation Call Notice (QCN) No.		SETS/41/PUR/FY25-26/RF DAUGHTER BOARD, Dated: 13-12- 2025		
2	QCN Document Issue Date	:	13-12-2025		
3	Last Date & Time for Receipt of Quotation	:	23-12-2025, 13:00 PM		
4	Date & Time of Opening of Sealed Quotation	:	23-12-2025, 15:00 PM		
5	Description of Item	:	Supply & Installation of a USRR X310 SDR with UBX-160 RF Daughter Board & Dual 10-Gigabit Ethernet PCIe Interface for the USRP		
6	Validity of Offer		90 days from the date of opening		
7	Estimated Value of QCN	:	Approx. <b>Rs. 22,21,000/-</b>		
8	Security Deposit (for finalized vendor only)		Rs. <b>66,630/-</b> (3% of QCN Value) – Refundable after warranty period		
9	Address for Submission	:	The Assistant (Purchase Officer) Society for Electronic Transactions and Security (SETS), MGR Knowledge City, CIT Campus, Taramani, Chennai – 600 113.		

- SETS GST No.: 33AACTS6338P1ZY
- Relevant Purchase Order (PO) Number

#### 4. Cover-I: Technical Bid - Document Requirements

- (Under Single Stage Two-Bid System)
- The bidder must submit the following documents inside Cover-I (Technical Bid):

#### 4.1 Experience Criteria:

 Work Orders and Completion Certificates for similar works completed in the past three (3) years, amounting to at least 50% of the estimated value.

#### 4.2 Bidder Turnover:

 Audited Balance Sheet & Profit & Loss Statement for the last three financial years, duly certified by a Chartered Accountant.

#### 4.3 OEM Certificate:

- The bidder shall submit a valid and current OEM Authorization Certificate for the offered model, issued by the Original Equipment Manufacturer.
- The certificate must clearly mention the model name, authorization validity, and bidder's firm name.

#### 4.4 Product Specification

- The bidder shall provide a detailed compliance statement covering all technical specifications listed in Annexure–I.
- The compliance statement prescribed in Annexure-I must be prepared on the bidder's official letterhead and duly signed and stamped by the authorized signatory.
- Each specification parameter must clearly indicate "Complied / Not
   Complied" with supporting technical literature wherever applicable.

## 5. Cover-II: Price Bid - Document Requirements (Annexure- A)

• The bidder shall submit the following inside Cover–II (Price Bid):

#### 5.1 Price Bid / BoQ

• Duly filled-in **Annexure-II**.

#### 5.2 All-Inclusive Price

- · Prices must include all charges such as:
- Taxes
- Duties
- Installation
- Transportation, etc.

#### 5.3 No Conditions

- The price bid shall enclose their specifications as mentioned in Annexure-I.
- No overwriting/corrections/deviations permitted.

#### **5.4 Price Validity**

• Prices must remain valid for the period specified.

#### 5.5 Signing and Sealing

• The Price Bid must be **signed and stamped** by the authorized signatory.

#### 6. Submission of Quotation

- **6.1 Quotations must be submitted in sealed cover at the** Purchase Section, SETS, on or before 23.12.2025, 13:00 PM.
- **6.2 SETS** reserves the right to extend the quotation submission deadline at its discretion.
- **6.3 Quotations received after the prescribed date and time** may not be considered **for evaluation.**
- **6.4 The quoted rates shall be** inclusive of delivery charges **to SETS but** exclusive of applicable GST.
- **6.5** The quoted rates must remain valid for 90 days from the last date of submission.
- 6.6 Vendors may submit quotations as mentioned for Annexure-I, provided the items are readily available with them.
- **6.7 Submission of the following documents is** mandatory **under** Cover–I (Technical Bid).

Quotations without these documents will not be considered:

- Experience Criteria
- Bidder Turnover (Audited Financials)
- OEM Authorization Certificate
- Product Specification Compliance Annexure I

#### 7. Evaluation of Quotations:

- Evaluation will be based on:
  - (a) Technical Specifications
  - (b) Reasonability of Price
  - (c) Delivery Period
- SETS may accept the quotation of the vendor whose price is lowest among technically compliant offers and suitable to SETS requirements.

**Asst Purchase Officer** 

**SETS** 

Detailed specification for Supply & Installation of USRR X310 SDR with UBX-160 RF Daughter Board & Dual 10-Gigabit Ethernet PCIe Interface for the USRP

Make: Ettus Research, A National Instruments Company

Model: USRP X310 SDR

Warranty: One Year

#### USRP X310 SDR (1 No) with the following accessories

• UBX-160 RF daughter boards (2 Nos) &

• Dual 10 gigabit Ethernet PCIE interface for the USRP (1 No)

#### 1. USRP X310 Base Unit (Main product) (1 No)

Particulars	Required specification	Offered specification
FPGA	Xilinx Kintex-7 XC7K410T (user-programmable)	•
RF Slots	2 × wideband daughterboard slots, supporting DC to 6 GHz coverage	f
Maximum Instantaneous Bandwidth	Up to 120 MHz per channel	
ADC/DAC	ADC – 14 bit @ 200 MS/s; DAC – 16 bit @ 800 MS/s	
Host Interfaces	Dual SFP(+) ports (1/10 Gigabit Ethernet), PCle x4 interface	
Clocking	Configurable sample clock; 10 MHz / 1 PPS coherent operation; GPSDO option (20 ppb accuracy)	
DC input	12V	
Form Factor	Compact and rugged half-wide 1U form factor	
Power Consumption	≈ 45 W (with 2× SBX-120 boards equivalent)	
Software Support	UHD driver API (GNU Radio, LabVIEW, C++/Python)	
Applications	Advanced Wireless Prototyping, Massive MIMO, Passive Radar, SIGINT	

#### 2. UBX-160 Wideband RF Daughterboards (2 Nos.) (Accessory)

Frequency Range	10 MHz – 6 GHz
Instantaneous Bandwidth	Up to 160 MHz (Tx path), 84 MHz (Rx path for 10–500 MHz)
Operation	Full Duplex; Coherent and Phase-Aligned on X-Series devices
USRP Compatibility	X Series and N Series
RX Noise Figure	2 - 7 dB (typical across band)
TX Power (Max)	> 20 dBm (10 MHz – 3.5 GHz); 13–18 dBm (4–5 GHz)
TX OIP3	> 40 dBm (10 – 500 MHz)
TX/RX IQ Imbalance	< -30 dBc (10 MHz - 6 GHz)

Ideal For	Cognitive Radio, Spectrum Monitoring, 5G Prototyping, Radar Research
3. Dual 10 Gigabit	t Ethernet Interface Card for USRP (10 GigE Kit) (1 No) (Accessory)
Description	Dual-port 10 Gigabit Ethernet PCIe x8 interface for USRP X300/X310
Contents	PCI-Express adapter card with two SFP+ ports
Purpose	The 10 Gigabit Ethernet Connectivity adapter card provides high-speed network connectivity between a PC and a USRP X300/310. this connectivity kit can stream up to 200 MS/s of RX streaming bandwidth.
Compatibility	Linux and Windows hosts running Ettus UHD software.

### Format for Submission of Quotation (Should be printed on letter head and duly signed by the Vendor)

To

The Assistant (Purchase Officer)
Society for Electronic Transctions and Security (SETS),
MGR Knowledge City,
CIT Campus, Taramani,
Chennai – 113.

Sub: Submission of quotation for Supply & Installation of a USRR X310 SDR with UBX-160 RF Daughter Board & Dual 10-Gigabit Ethernet PCIe Interface for the USRP -Reg

Ref: SETS QCN with ref.no: SETS/41/PUR/FY25-26/RF DAUGHTER BOARD, Dated: 13-12-2025.

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S.NO	Description of Items	Quantity (in Nos.)	Rate per Unit	Total Amount INR	in
1	Supply & Installation of a USRR X310 SDR with UBX-160 RF Daughter Board & Dual 10-Gigabit Ethernet PCIe Interface for the USRP.	ONE			
	SUB Total				
	GST 18%				
	Total Amount (Inclusive	of GST)			
Total A	mount in words:				

#### **Statement of Declaration**

Signature with Seal Designation: Name & Contact No: