UNIVERSITY OF CALCUTTA

Centre for Research in Nanoscience and Nanotechnology
JD-2, Sector-III, Salt Lake City
Kolkata- 700106

NOTICE INVITING QUOTATION

Sealed Quotations are invited from reputed suppliers or manufacture for the 10 KVA UPS for XRD System in Clean Room Block at CRNN.

1	N.I.Q No	Dir/169/XRD/10 KVA UPS/CRNN(2016) Date: 04.03.2016
2	Name of Work	Supply of 10 KVA UPS for XRD System at Clean Room block of Technology Campus (Acharya Prafulla Chandra Roy Siksha Prangan), Salt Lake.
3	Time of completion	Within 1 month from issuing Order.
4	Eligibility Criteria	Appendix – A3
5.	Technical Specification	Annexure C
6	Last date of Application for participating in bid	29/07/2016 (up to 2.00 PM)
7	Last date of Collection of Quotation Papers	02/08/2016 (up to 2.00 PM)
8	Last date of dropping of Quotation	05/08/2016 (up to 2.00 PM)
9	Date of opening of Quotation	-

For details enquiry & further correspondence feel free to contract CRNN office at any working day between 11.00 am to 4.00pm.

N. B. The authority reserves the right to reject any or all tenders/quotation without assigning any reason what so ever.

Director, CRNN

APPENDIX-A3

University of Calcutta has procured X-Ray Diffractometer (Model: X'Pert Powder, Make PANanlytical, The Netherlands) for its Center for Research in Nanoscience and Nanotechnology, Saltlake, JD-2, Sector-3, Kolkata-98. **Quotations are invited from bonafide vendors for an online UPS systems with 10 KVA capacity** to be installed at the same address for the suppling power to the said X-Ray diffractometer. The details of the tender specification are given herewith:

1) Eligibility criteria for participation in the Tender :

A) The Bids shall be submitted by only the OEM (Original Equipment Manufacturer) or authorized sales and service provider of OEM in case OEM is not participating. Declaration from OEM specific to this tender in this regard needs to be submitted.

B) The tenderer must take the responsibility for the delivery, installation and commissioning of the product at the site specified during the order process and at time specified during the order process. Delay in installation and /or commissioning will be subject to penalize.

C) Manufacturer should be ISO 9001:2008 Certified, ISO 14001:2004 certified.

D) The vendor, to whom the order shall be placed is required to provide necessary certificate(s) from ERTL/ETDC/CPRI for the particular instrument at the time of delivery.

E) Manufacturer should have factory and R&D in India. Manufacturer is required to provide the full details of factory address in India.

F) The Bidder shall be an established UPS Manufacturing company registered under the Companies Act, 1956 having operations in India for the last three years as on 31.12.2014 (Certificate of Incorporation) and shall have their registered offices in West Bengal and submit valid documentary proof of

· Certificate of incorporation
· Trade License of West Bengal

G) The Bidder should have executed (completed) at least two similar or higher rating orders in or around Kolkata at any Govt. Department / Educational & Research Institutes / PSU / Board / Council or similar. The UPS should have installed alongwith same kind of load which is running successfully atleast for a period of not less than 2 years.

Copies of suitable documents like Purchase Orders, etc. for verification of the order values and work completion / customer satisfaction certificates (or similar documents) from customers against the same orders for verifying successful completion of the orders must be submitted as evidences.

H) The Bidder should have delivered and installed at least two similar UPS equipment to support high value sophisticated scientific instruments at reputed research institutions/Universities in India

I) The manufacturer should have WB sales tax registration for more than 5 years with same company name. A copy of the certificate should be enclosed with the offer.

2) Technical specifications :

The details of the technical Specifications for 10 KVA online UPS is given in ANNEXURE-C.

ANNEXURE-C

Technical Specifications for 10 KVA online UPS suitable for XRD system

Description	Specification
Capacity	10 KVA, 8 KW
Technology	True On Line UPS with double conversion technology based on Digital Signal Processor (DSP), noiseless operation. Pure & steady Sine wave output. Full proof protection. Compact & rugged with wheels at base.
Features Desired	Handles high inrush currents inherent in loads without tripping or transfer to Bypass.
	High frequency Charger should ensures ripple free & controlled charging to enhance the life of batteries, Rectifier should be IGBT based to improve input power factor to 0.99, works on a wide input voltage range. Saves on electricity.
	Fully Automatic control for Battery low, Auto restart, Auto recovery from mains, Under voltage and Over voltage trip, Automatic return from bypass on recovery from overload requires no manual attention.
	Flexible synchronization facility for Forced synchronization or forced 50Hz. Operation possible over riding the specified synchronous range. Provision for locking transfer in Asynchronous mode.
	Ready status and Fault diagnostics with minimum 20 event logging in LCD display.
	Input phase reversal protection
Input Voltage	400 V $\pm$ 25% VAC three Phase+N
Input frequency range	50 Hz +/- 10%
Input Power Factor	0.99
Output Voltage	230VAC ± 1%, Single phase
Output Frequency	50Hz ± 0.1% free run
Output Crest factor	3:1
Inverter Overload	110% for 60 min,125% for 10 min, 150% for 1 min

Output Transient response for 100% step load variation	Voltage dip/rise less than +/– 4% and recovery within 5 milliseconds
Output Overall AC to AC efficiency	> 86%
Output Harmonic distortion	< 2% on linear load & <3% on Non linear Load
Output isolation	Built-in Double Wound isolation transformer at output.
Wave form	Pure sine wave
Load Power factor	0.8
UPS Failure	During failure in the UPS equipment the A.C. load should be directly transfer to the AC line in less than ¼ cycle.
Maintenance by pass switch	Inside the UPS module used to connect the alternator supply to critical load while electrically isolating static switch and inverter for maintenance purpose.
Battery Type	Lead acid sealed maintenance free, VRLA Battery .
Battery Backup time	Minimum 30 minutes with full load
Battery Make	Amara Raja Quanta / Exide power safe
Battery Rating	12 V, 26 AH or higher (Each battery rating and no. of batteries should be specified by the vendor)
Battery minimum Capacity	8000 VAH or higher
Protections Desired	Input Over/ Under voltage
	Output Over/Under voltage
	Battery Under voltage
	Output overload / short circuit
	Over temperature, Manual bypass switch
Indications	LCD indication for Line ON, Battery ON, Mains abnormal, Load on battery, load on bypass & inverter trip.

Communication Computer interface	Computer interface should have capability to communicate with the computers and network for early warning and fault status. Supports all major Operating Systems and environments and optional SNMP enabled port
Environment Audible noise	< 55dBA at 1 m distance from panel.
Environment Operating temperature	Between -3 to 50 deg c
Relative humidity	95% non condensing
Environment Standards & protection class	IP-20
Surge protection at the Input	A suitable transient voltage surge suppressor or surge protection device should be provided at the input of the UPS
Important	The Technical Specification along with **Credentials & Eligibility should be certified and verified as per the tender notice.**