Dr. Nandini Gupta Professor

Fax: (0512)-2590063 e-mail:ngupta@iitk.ac.in

Ph: (0512)-2597511

No: IITK/EE/HVLab/2014-15/NG/06December 31, 2014

Sub: Enquiry for Online 10kVA UPS.

We need one <u>Online 10 kVA UPS</u> for our "Broadband Dielectric Spectrometer" meeting the specifications given in Annexure-1. Kindly submit sealed quotation for the same as mentioned in the annexure so as to reach the under mailing address <u>on or before 5 pm of January 16, 2015.</u>

Kindly quote the price for UPS and Batteries separately in same quotation,

Kindly adhere to the following details:

- The order will be placed in the name of the principal.
- A certificate from principals indicating that you are their authorized dealer should be submitted.
- The quote should be valid for a period of at least 60 days.
- The warranty period should be clearly indicated.
- The time for delivery should be indicated (preferably not more than 4 weeks)
- Payment terms will be as per IIT Kanpur rules.
- The indenter reserves the right to cancel the tender without being answerable.
- Complete details of products should be attached with quotation.
- Warranty must be for three years after installation (specify clearly).
- The UPS should meet the relevant BIS Standards specifications. Please provide a copy testing certificate from BIS approved testing bodies.

Dr. Nandini Gupta Professor

MAILING ADDRESS:

Mr. Lekhraj Singh
High Voltage Laboratory, WL 114
Department of Electrical Engineering
Indian Institute of Technology Kanpur
Kanpur – 208016, Uttar Pradesh, India

Annexure -1, Technical specifications for Online 10 kVA UPS

| Feature | Specifications. |
|-----------------------|---|
| Capacity | 10 kVA Online |
| Technology | IGBT Based DSP controlled Rectifier |
| Input Voltage | 415±20%V AC, 3-phase 4 wire |
| Input Frequency Range | 50 Hz±10% |
| Input Power Factor | >0.98 |
| Output Voltage | 230V AC ±1% Single Phase |
| Output Frequency | 50 Hz |
| Output Power factor | 0.98 to Unity |
| Output Wave form | PWM Sine Wave |
| Isolation | Inbuilt Output Isolation Transformer |
| Protection | Input and Output over voltage and under voltage, Output Overload, output short circuit, battery Low trip etc. If the UPS shuts down after permissible or deep discharge, it should switch On automatically after mains power restoration. |
| Indications | Input: Voltage & Current, Mains On, Inverter On, Battery low, over load, Output: Voltage, Current, frequency, power, and load etc. |
| Alarm | Mains fail, battery low, Trip Condition etc. |
| LCD Display | Input Voltage, output Voltage, Output Current, Battery charge etc. |
| Batteries | 12 volts Lead acid Sealed Maintenance free batteries, Preferably battery makes: Exide, Quanta, Panasonic etc. |
| Backup | 30 Minutes on Full Load. VAH Should be minimum (10000Ah) |
| Bypass | Automatic Static Bypass Switch |
| Remote Monitoring | SNMP support |
| Ambient Temperature | 0-50 ^{0C} |
| Enclosure | MS Powder coated with caster wheels for UPS and batteries |
| Warranty | 3 Years for UPS and batteries |

| | 125% for 10 minutes |
|---------------------|---------------------------------|
| Over load capacity | |
| | <55dB @ 1meter |
| Noise level | |
| | < 2% (Linear Load), |
| Harmonic distortion | ≤5% (Non-Linear Load) |
| | >90% at full load |
| Efficiency | |
| | USB port for software interface |
| Communication | |
| Interface | |
| | One |
| Quantity | |