INDIAN INSTITUTE OF TECHNOLOGY KANPUR

Department of Electrical Engineering

Enquiry No.: EE/SA/Inq/2016-17/05

Opening Date: 25-Oct-2016 Closing Date: 31-Oct-2016

Sub: Inquiry for online UPS and battery bank

We are interested in purchase of an online UPS along with battery bank of the following specifications. Our organization is an educational institute of repute and liable to get **educational discount** from the manufacturer / supplier. Please specify the discount separately.

Technical specifications of the product should be included with the quotation.

Please send your **Sealed Quotation** to the undersigned for the same. The envelope should be marked as "**Online UPS- EE/SA/Inq/2016-17/05**"

Items required:

Technical Specifications

Item required	Feature	Specification	Quantity
6 kVA	Continuous Rated Output Power	6 kVA, 4.8 kW	1
online	UPS Type	True Online (Double Conversion) UPS	
UPS	Input Parameters		
	Operating voltage range	176~264Vac	
	Operating frequency range	50Hz: 46~54Hz,	
	Power factor	<u>≥</u> 0.99	
	Current Harmonic distortion(THDi)	<=7%	
	Generator input	Support	
	Output Parameters		
	Rated Voltage	220/230/240 V _{ac}	-
	Voltage Regulation	<u>+</u> 1%	
	Frequency (Bat. Mode)	50 Hz <u>+</u> 0.2 Hz	
	Load Current Crest Factor	3:1	
	Over load capacity (On-line Mode	100% <load<110%:10 mins;<="" td=""></load<110%:10>	
	Efficiency (battery to load and mains to load)	> 91% with linear load	
	Transfer time (Mains to battery and battery to mains)	<= 8 msec	
	Audible alarm	Battery low, overload, system fault	

Display	LCD
Communication Port	USB
Load compatibility	Should be able to support 11 computers (i7, 24" display) along with 6nos of 40W CFL lights
Environmental specification	
Storage temperature	-15 to 55 Deg. C
Operating temperature	0-40 Deg. C
Noise Level	Less than 58 dB
Relative humidity	0 to 95%
Warranty	UPS must have replacement warranty for a minimum period of 3 years. Warranty should include labor, component, transport and other charges.

Battery Specification

Feature	Specification
Energy requirement	10,000 Whr / 834 Ahr
Total back up time	At least 1 hour at full load
Battery type	Sealed Maintenance Free (SMF) Battery
Preferred battery make	Exide, Quanta, Panasonic, Amaron, Amara Raja, Rocket
Warranty	Batteries must have replacement warranty for a minimum period of 3 years. Warranty should include labor, component, transport and other charges.
Battery housing / Mechanical Structure	Stand/Rack required to house batteries. Should be covered from top, bottom and all sides using metal sheet. Appropriate ventilation from sides should be available. Made of perforated sheet (22 gauge) metal, with spray painted. There should be a minimum of 2 inch gap between adjacent batteries and a minimum top clearance of 4 inch when housed in the rack. The ground clearance of the rack should be at least 4 inch. Housing should enclose all the batteries.

Note:

- 1. Your quotation shall contain Authorization Letter from manufacturer.
- 2. Quotation must be valid for minimum of 60 days.

- 3. **Delivery period should not be more than 2 weeks** and delivery should be at IIT Kanpur. The Penalty @1% per week or part thereof subject to max 10% of the delivery price will be deducted from the balance payment, if supply is not completed within stipulated period.
- 4. Send complete detail of the product(s).
- 5. Payments terms: 90% on installation and 10% on satisfactory report.
- 6. Price must include all taxes and charges (including delivery, installation etc.)
- 7. IITK is exempted from custom duty and road permit.
- 8. All prices are to be FOR IIT Kanpur.
- 9. The Institute reserves the right of accepting and rejecting any quotations without assigning any reason.

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