भू-प्रौद्योगिकी प्रयोगशाला जानपद अभियान्त्रिकी विभाग भारतीय प्रौद्योगिकी संस्थान कानपुर-208 016 (उ.प्र.)



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M/S

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Enquiry no. CE/GTE/RS/2014/5

Date: 18/Nov/2014

Subject: Inviting sealed quotation for 8 KVA single-phase UPS system with batteries.

Dear Sir/Madam,

Sealed Quotations are invited for 8 KVA single-phase UPS system with high quality and reliable batteries which should give 60 minutes and 120 minutes minimum of backup time-period on full load.

Following are the general technical specifications required for the proposed UPS system.

TECHNICAL SPECIFICATIONS FOR 8KVA True On Line UPS SYSTEM

S.NO	SPECIFICATION/ DESCRIPTION
1.	Capacity;
	8KVA / 6400Watt
	UPS TOPOLOGY
	Rack / Tower convertible True double conversion online Technology using IGBT
	ELECTRICAL CHARECTERISTICS
2.	INPUT (Rectifier)
A	Nominal Input Voltage range 380V- 415V for three phase on full load
В.	Input Voltage Variation at Full Load 160VAC - 280 VAC, at 50% load where as 100V-280VAC per phase.
C.	The same should be compatible to run on three phase input.
D.	Input frequency Range 48-52 Hz
E.	Input Harmonic (THDi) <5% on available campus voltage quality
F.	P.F. at full load >0.99
3.	OUTPUT (Inverter) IGBT Based (Guaranted continuous rated output power at rated output voltage)
Α.	Voltage 200/208/ 220 /240VAC, Programmable,+ / -2% on single phase
	Voltage between neutral and earth is 0-5 volt. It should be run compatible for
	induction motor, vaccum pump, load frame loads, computers and sensors.
В.	Output wave form pure sine wave
C.	Voltage regulation +/-2%(0-100% Linear Load)
D.	Voltage Harmonic Distortion (Rated Input Voltage, rated Input frequency)
	<2% (Linear Load)
	<5% non Linear Load
E.	Crest factor:3:1
F.	Automatic & manual both bypass is required.
G.	Inverter Over Load Capacity
	105% Conitnious,125% for 5minutes, >150% for 30sec
H.	Power Factor 0.8 or above

Location: Room 101-105, Western Lab. Extension Building

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	999 / Fax
I.	Frequency 50 Hz +/-0.05Hz
J.	Overall Efficiency.>92%
K.	Noise level has to be mentioned it should be low as possible preferably below low
	noise
4	Battery
A.	Battery sealed maintenance free lead acid
В.	Types of battery supported by UPS- Sealed maintenance free lead acid
C.	Minimum VAH Required 9984VAH,/ minimum back up for full load is 60 minute (sufficient no. of batteries should be given for at least 60 minute backup at full load) & for 120 minutes sufficient no. of batteries should be given at least for 120 min backup at full load.
D	Make of battery: Exide, Panasonic / G & Y (Rocket) / Amararaja - Quanta only
5	General
A	Operating temperature 0deg centigrade to 60degree centigrade, alarm indication, Mains on , inverter on/off ,main failure , low battery , over load
В	Vendor should provide tray for keeping battery banks. And all cabling from battery to ups is in vendor 's scope
APPRO VALS	BSMI , C-TICK, CE, EN50091-1, EN50091-2, VDE ,EN55022 CLASS A, EN60950, EN61000-2-3, GOST, JEON, PCBC, UL1778, VCCI, CSA
6	Terms and conditions
A	After sale service:
	Local service should be available.
В .	UPS SHOULD BE WARRANTED FOR MINIMUM 24 MONTHS REPLACEMENT warranty from the date of delivery where as the batteries should be warranted for at least 2 year from the date of delivery. The warranty should be onsite warranty

Please send your offer for the above mentioning the following:

- 1. Validity of the quotation should be at least 90 days.
- 2. Technical specifications in detail.
- 3. Delivery time.
- 4. Educational discount applicable.
- 5. Payment terms.
- 6. Any other relevant details.

Kindly arrange to send the quotation(s) with detailed specifications of the item in a sealed envelope to the given address, cited above, so as to reach us on or before the closing date 1 December 2014.

The undersigned reserves the right to accept the offer in part or full or reject without assigning any reason.

Sd/

(Rajesh Sathiyamoorthy)