

INDIAN INSTITUTE OF TECHNOLOGY DELHI  
HAUZ KHAS, NEW DELHI – 110016

DATE: 02-08-2013 (2<sup>nd</sup> AUGUST, 2013)

### NOTICE INVITING QUOTATIONS

**NIQ No: IITD/SBS/2013-14/AM/UPS40      DUE DATE: 16-08-2013 (16<sup>th</sup> AUGUST, 2013)**

Sealed quotations along with complete details (brochures/web-site details) are invited for supply and installation of a “40 KVA Online UPS System” (Quantity – 2 Numbers, one acting as “Main” and the other serving as “Back-up” with automatic switching/change-over) as per the following description and desired specifications:

#### Specifications are for each of the two units

<b>Rated power (in KVA)</b>	40
<b>AC INPUT</b>	
Phase	3 Phase + N + G
Voltage Range	210V AC to 480V AC (with load dependent dynamic range)
Frequency	50 / 60 Hz
Frequency range	± 10%
Power factor	≥ 0.99
Total harmonic distortion (THDi)	≤ 3%
<b>OUTPUT DATA</b>	
Nominal Output Voltage	220V AC single phase
Voltage regulation	± 1% static, ± 3% dynamic at 100% load change, < 2 ms recovery time
Frequency	50 / 60 Hz ± 5%
Frequency tolerance	± 0.1% (auto-synchronized), ± 1% (synchronized with the mains)
Power factor	0.8
Total harmonic distortion (THDi)	≤ 2% (at linear load), ≤ 5% (non-linear load)
Crest Factor	3 : 1
Overload	120% rated load for 10 min., 150% rated load for 1 min.
<b>GENERAL DATA</b>	
Topology	True on-line, double conversion with SPWM controlled IGBT rectifier and inverter
Efficiency	≤ 93% (on-line mode), ≥ 98% (eco mode)
Parallel technology	Optional
Redundancy	Optional
Control	Multi DSP
Type of protection	IP 20 or better
Standards	EN 62040-1 (safety), EN 62040-2 (EMC)
Static & maintenance by-pass	Standard (dual input 60, 80 optional, 100-130 standard)
<b>MONITORING AND CONTROL DATA</b>	

Power management display (PMD)	Interactive display screen, push buttons
Communication port	RS 232 / RS 485
Communication port (dry port)	Programmable 7 contacts or better
Advance communications	Modbus, Web, SNMP (optional)
Control and monitoring software	Required for both service and shut down
Alarms	Both audible and visible alarms
<b>PHYSICAL DATA</b>	
Ambient temperature	0 deg. C to 45 deg. C
Relative humidity	0% - 95% (non-condensing)
Noise	≤ 65dB (at 1m) or better
<b>Battery Back-up with battery rack</b>	
Rating and Number (No.)	Appropriately sized SMF type batteries with 1 rack for housing – back up time ≥ 45 minutes
Battery Health Management	As per best norms
On-site replacement warranty	≥ 24 months
Quality	The brand of the batteries should be clearly with proof of establishment of the brand. Proper certificate from the manufacturing company should also be provided that should be valid for up to the offered on-site warranty.

### TERMS & CONDITIONS COVERING SUBMISSION OF QUOTATIONS

1	<b>About bidding: Who can bid?</b>	(a) <b>Either</b> the Indian agent on behalf of the Principal/OEM <b>or</b> Principal/OEM itself can bid but both can not bid simultaneously. (b) If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product. (c) Multiple bids are required to be submitted for multiple models/systems by an Indian agent or Principal/OEM. Single bid must be for a single UPS system.
2	<b>Agency-ship Certificate</b>	The vendor must attach with the offer a <b>latest sole selling and servicing agency-ship certificate from OEM</b> for sale/service in India.
3	<b>Delivery and Installation</b>	School of Biological Sciences, IIT Delhi.
4	<b>Payment Terms</b>	Quotations with Advance Payment terms will be rejected
5	<b>Validity of Quotations</b>	Quotations should be valid for at least 3 months from the date of receipt.
6	<b>Correspondence</b>	No correspondence regarding acceptance/rejection of a quotation will be entertained.
7	<b>Discount/Rebates</b>	Special discount/rebate, wherever admissible, keeping in view that the supplies are being made for Educational purpose in respect of

		public institution of National importance may please be indicated.
8	<b>Warranty &amp; AMC</b>	(a) <u>Standard comprehensive warranty</u> extendable up to at least three (03) years on UPS, and at least two (02) years on batteries, from the date of installation, is required. (b) Beyond the minimum three (03) years warranty period, AMC for maximum seven (07) additional years is required. The cost of the extended warranty (if applicable), and AMC must be indicated separately.
9	<b>Delivery period</b>	Delivery period must be clearly specified.
10	<b>Printed brochures/website links</b>	The printed brochures and/or website link(s) detailing the technical specifications of the items quoted must be provided in the offer, failing which the quotation may be rejected.
11	<b>Proprietary item</b>	In case the offered equipment is proprietary in nature, the same must be mentioned over the Main envelope and both the Technical and Financial envelopes inside the main envelope. The necessary proprietary certificate clearly stating the proprietary details should be furnished together with the Technical quotation.
12	<b>Site Visit</b>	The quoting vendor must visit the site before quoting to inspect the space and become familiar with the commissioning requirements.
13	<b>Compliance Statement</b>	<b>Tabulated compliance report</b> for both the <b>Technical specifications</b> and the <b>Terms and Conditions</b> (including Site Visit) must be provided with the Technical bid.
14	<b>Submission of quotations</b>	(a) The quotation, in sealed cover, mentioning the NIQ reference and due date on the envelope addressed to the undersigned should be submitted to the front counter/office of School of Biological Sciences before the due date and time. Submissions not adhering to this term will not be considered. (b) Separate technical and financial bids must be submitted. The sealed envelope in (a), i.e. mentioned above, should contain two (02) individually sealed envelope, each mentioning the NIQ reference and due date and clearly marked as “Technical” and “Financial” respectively. (c) The financial bid must contain itemized costs and a consolidated total at the end (inclusive of all applicable charges).
15	<b>Rejection</b>	Quotations not conforming to the terms and conditions will be rejected.
16	<b>Institute’s rights</b>	IIT Delhi reserves the rights of acceptance or rejection of any or all quotations without assigning any reason(s). The discretion for increasing or decreasing of the quantities demanded also vests with the Institute.

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