

	Electronics Corporation of Tamil Nadu Limited
Rate Contract Tender	<div data-bbox="544 1077 1257 1227"><hr/>Supply, installation and commissioning of UPS Systems and related items<hr/>Tender Ref. ELCOT/Proc/OT/32821/UPS Systems/2015-16</div>
	Tender Document

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Acronyms and Definitions

AMC	Annual Maintenance Contract
CST	Central Sales Tax
DSC	Digital Signature Certificate
EMD	Earnest Money Deposit
ERTL	Electronic Regional Test Laboratories
ETDC	Electronics Test & Development Centre
FOR	Free On Road / Rail
HR	Human Resources
HRMS	Human Resources Management System
ICT	Information and Communication Technology
IPR	Intellectual Property Rights

AMC	Annual Maintenance Contract
ISO	International Organisation for Standardisation
IT	Information Technology
LD	Liquidated Damage
LOA	Letter of Acceptance
MIS	Management Information System
NABL	National Accreditation Board for Testing and Calibration Laboratories
OEM	Original Equipment Manufacturer
PC-OEM	Personal Computer – Original Equipment Manufacturer
RFP	Request for Proposal
ROHS	Restriction Of Use of Hazardous Substances
SAMEER	Society for Applied Microwave Electronics Engineering & Research.
SD	Security Deposit
SDK	Software Development Kit
SNR	Site Not Ready
SPOC	Single Point of Contact
SRS	Software Requirements Specification
ST	Service Tax
VAT	Value Added Tax

Know Your Rights

1. ALL TENDERS WILL BE OPENED ONLY IN THE PRESENCE OF THE BIDDERS.
2. THE BIDDERS HAVE A RIGHT TO INSIST ON PROCESSING OF TECHNICAL BIDS IN THE BIDDERS PRESENCE ONLY.
3. PRICE BID OPENING AND PRICE COMPARISON WILL BE DONE ONLY IN THE PRESENCE OF THE BIDDERS.
4. VENDORS / BIDDERS ARE ELIGIBLE FOR A VENDOR SIGNED COPY OF THE PRICE BID COMPARISON STATEMENT ON THE SPOT.
5. PLEASE INSIST ON YOUR RIGHTS AND AVAIL THE SAME.

MANAGING DIRECTOR
ELCOT

Letter of Undertaking

To
The Managing Director
Electronics Corporation of Tamil Nadu Limited
692 Anna Salai, Nandanam
Chennai-600035

Sir,

Sub: Undertaking for participating in ELCOT's Procurement Tender - Reg.
Ref: **Tender No. ELCOT/Proc/OT/32821/UPS Systems/2015-16**

I/We ----- have gone through the Terms and Conditions, Scope of Work and Specification and will abide by them as laid down (Tender Documents, Technical bid and Price Bid)

I/We ----- hereby confirm that our Company was not blacklisted by any State Government/ Central Government/ Public Sector Undertakings during the last three years. We also hereby confirm that our EMD/SD was not forfeited by any State Government / Central Government / Public Sector Undertakings during the last three years due to our non-performance, non-compliance with the tender conditions etc.

I/We ----- hereby declare that all the particulars furnished by us in this Tender are true to the best of my/our knowledge and we understand and accept that if at any stage, the information furnished is found to be incorrect or false, we are liable for disqualification from this tender and also are liable for any penal action that may arise due to the above.

I/We ----- certify that no refurbished components are used in the manufacturing and supply of UPS Systems and related items / tendered items. The licences for the operating systems and other software to be installed in the UPS systems to be delivered under this contract is certified as genuine and valid.

I/We _____ certify that we are liable and responsible for any disputes arising out of Intellectual Property Rights.

In case of violation of any of the conditions above, I/We understand that I/ We are liable to be blacklisted by ELCOT for a period of three years.

Yours faithfully
for _____
Name, Signature
Designation
Seal

Note:

- 1) Declaration in the company's letter head should be submitted as per format given above
- 2) If the bidding firm has been blacklisted by any State Government/ Central Government/ Public Sector Undertakings earlier, then the details should be provided.

1. Preamble

Electronics Corporation of Tamil Nadu Limited (ELCOT), a wholly owned Government of Tamil Nadu Undertaking is the Optional Procurement Agency of the Government of Tamil Nadu for procurement of IT related products like Computers, Printers, other peripherals and software as per G.O.Ms.No.58 of Finance (BPE) Department dated 16.2.1999 with latest amendments. ELCOT is procuring various IT related products for all the State Government Departments / Boards / Autonomous Bodies, etc. As part of the procurement activities, ELCOT invites **RATE CONTRACT Tender** inviting bids for the procurement of **UPS Systems and related items** for various Government organisations.

Short Titles used in the Tender Document:

- 1) **Bidder:** Bidder means the party who makes a formal offer in pursuance of the tender floated.
- 2) **Successful Bidder:** Successful Bidder means the Bidder who becomes successful through the tender process.
- 3) **Day:** A day means a calendar day.
- 4) **Service Centre:** Service Centre means the centre or place, wherein the Bidder, inter alia undertakes and performs the service activities relating to the UPS Systems and related items indicated in the tender and shall include a Direct service centre or Authorised dealer or Franchisee service centre of the bidder:

Details about the Regions and Districts:

Region	Districts to be Covered under each Region
North	Chennai, Kancheepuram, Tiruvallur, Tiruvannamalai, Villupuram & Vellore.
East	Ariyalur, Cuddalore, Thanjavur, Tiruchirapalli, Thiruvarur, Nagapattinam, Pudukkottai & Perambalur.
South	Ramanathapuram, Madurai, Theni, Dindigul, Tirunelveli, Virudhunagar, Thoothukudi, Sivagangai & Kanyakumari.
West	Salem, Erode, Karur, Coimbatore, Tiruppur, Dharmapuri, Namakkal, Krishnagiri & The Nilgiris.

- 6) **Life Cycle Cost:** Life Cycle Cost means the total cost to be incurred by the customer towards the purchase of UPS Systems & Related Items and also charges to be incurred by the customer towards maintenance of UPS Systems & Related Items for the whole period including Standard warranty period and **Post Warranty period of 2 years.**
- 7) **Purchaser:** Purchaser means the end-user for whom the procurement is indented through the tender.

2. Tender Schedule

ELECTRONICS CORPORATION OF TAMILNADU LIMITED (ELCOT)

1.	Tender inviting Authority, Designation and Address	The Managing Director ELCOT, II Floor MHU Complex 692 Anna Salai, Nandanam, Chennai-600035. e-mail: md@elcot.in and procurement@elcot.in URL: www.elcot.in
2.	A) Name of the Work	Supply, installation and commissioning of UPS Systems and related items
	B) Tender reference	ELCOT/Proc/OT/32821/UPS Systems/ 2015-16
	C) Installation	At the customer premises Throughout the State of Tamil Nadu
3.	Tender documents available place	Tender documents can be freely downloaded from www.elcot.in and www.tenders.tn.gov.in till closing date and time of the Tender. The tender document fee is waived for downloading the Tender.
4.	Cost of Tender Document	INR 1,100/- per Tender Document for direct purchase from ELCOT. The Tender document fee is waived for the downloaded Tender document.
5	Earnest Money Deposit (EMD)	Rs.10 Lakhs (Rupees Ten Lakhs only) should be paid by way of Demand Draft or Banker's Cheque drawn in favour of Electronics Corporation of Tamil Nadu Limited and payable at Chennai only.
6	Tender submission	Two Part Tender comprising of Technical Bid and Price Bid should be submitted MANUALLY . Stage-1 – Technical Bid, Stage-2 – Price Bid opening. Tenders received after the due date and time will be summarily rejected.
7	Due Date, Time and Place of submission of Tender	03.09.15 at 3.00 PM at the address mentioned in Column (1) in the Tender Schedule.
8	Date, Time and Place of opening of the Technical Bids	03.09.15 at 3.15 PM at the address mentioned in Column (1) in the Tender Schedule.
9	Date, Time and Place of opening of Price Bids	Will be intimated only to the Technically Qualified Bidders

3. General Instructions

3.1 General

- a) The Bidders are requested to examine the instructions, terms and conditions and specifications given in the Tender. Failure to furnish all required information in every respect will be at the Bidder's risk and may result in the rejection of bid. Relaxation in submission of the documentary proof had been given ONLY to the existing suppliers and such relaxation from submission of documents is applicable wherever they are eligible to avail.
- b) It will be imperative for each Bidder(s) to familiarise itself/ themselves with the prevailing legal situations for the execution of contract. ELCOT shall not entertain any request for clarification from the Bidder regarding such legal aspects of submission of the Bids.
- c) It will be the responsibility of the Bidder that all factors have been investigated and considered while submitting the Bids and no claim whatsoever including those of financial adjustments to the contract awarded under this tender will be entertained by ELCOT. Neither any time schedule nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder to appraise themselves.
- d) The Bidder shall be deemed to have satisfied itself fully before Bidding as to the correctness and sufficiency of its Bids for the contract and price quoted in the Bid to cover all obligations under this Tender.
- e) It must be clearly understood that the Terms and Conditions and specifications are intended to be strictly enforced. No escalation of cost in the Tender by the Bidder will be permitted throughout the period of Agreement or throughout the period of completion of contract whichever is later on account of any reasons whatsoever.
- f) The Bidder shall make all arrangements as part of the contract to supply, commission and train the beneficiaries at various locations at their own cost and transport.
- g) The Bidder should be fully and completely responsible to ELCOT and State Government for all the deliveries and deliverables.

3.2 Clarifications in the Tender

- a) A prospective Bidder requiring any clarification in the Tender may notify ELCOT by letter or by Fax or by E-mail to md@elcot.in with a copy to procurement@elcot.in. We encourage paper free e-mail communication.
- b) The responses to the clarifications will be notified in the websites by means of Corrigendum to the Tender Document. It would be advantageous to commence e-mail contact with procurement@elcot.in to register your e-mail id.

3.3 Amendments to the Tender

- a) A Pre-bid meeting will be held for addressing the clarifications on the date and time mentioned in the Tender Data Sheet or any other date to be decided by ELCOT. The Bidders are requested to participate in the Pre-bid meeting and get the clarifications.
- b) Before closing of the Tender, clarifications and amendments if any will be notified in the websites mentioned in the Tender Schedule. The Bidders periodically check for the amendments or corrigendum or information in the websites till the closing date of this Tender. ELCOT will not make any individual communication and will in no way be responsible for any ignorance pleaded by the Bidders.
- c) No clarifications would be offered by ELCOT within 48 hours prior to the due date and time for opening of the Tender.
- d) Before the closing of the Tender, ELCOT may amend the Tender document as per requirements or wherever ELCOT feels that such amendments are absolutely necessary.
- e) Amendments also may be given in response to the queries by the prospective Bidders.
- f) Such amendments will be notified in the websites mentioned in the Tender schedule.
- g) ELCOT at its discretion may or may not extend the due date and time for the submission of bids on account of amendments.
- h) ELCOT is not responsible for any misinterpretation of the provisions of this tender document on account of the Bidders failure to update the Bid documents on changes announced through the website.

3.4 Language of the Bid

- a) The bid prepared by the Bidder as well as all correspondence and documents relating to the bid shall be in English only. The supporting documents and printed literature furnished by the bidder may be in another language provided they are accompanied by an accurate translation in English duly notarised, in which case, for all purposes of the bid, the translation shall govern. Bids received without such translation copy are liable to be rejected.

3.5 Bid Currency

Price should be quoted in Indian Rupees (INR) only and Payment shall be

made in Indian Rupees only.

3.6 Contacting Tender Inviting Authority

- a) Bidders shall not make attempts to establish unsolicited and unauthorised contact with the Tender Accepting Authority, Tender Inviting Authority or Tender Scrutiny Committee after the opening of the Tender and prior to the notification of the Award and any attempt by any Bidder to bring to bear extraneous pressures on the Tender Accepting Authority shall be sufficient reason to disqualify the Bidder.
- b) Notwithstanding anything mentioned above, the Tender Inviting Authority or the Tender Accepting Authority may seek bonafide clarifications from Bidders relating to the tenders submitted by them during the evaluation of tenders.

3.7 Force Majeure

Neither the Purchaser / ELCOT nor the Successful Bidder shall be liable to the other for any delay or failure in the performance of their respective obligations due to causes or contingencies beyond their reasonable control such as:

- Natural phenomena including but not limited to earthquakes, floods and epidemics.
- Acts of any Government authority domestic or foreign including but not limited to war declared or undeclared, priorities and quarantine restrictions.
- Accidents or disruptions including, but not limited to fire, explosions, breakdown of essential machinery or equipment, power and water shortages.

3.8 Arbitration

In case of any dispute, the matter will be referred to a sole Arbitrator to be appointed by the Managing Director of ELCOT under the “Arbitration and Conciliation Act 1996”. The arbitration shall be held in Chennai, India and the language shall be English only. Subject to the above, the Courts at Chennai alone only shall have jurisdiction in the matter.

4. Eligibility Criteria

The Bidders should have the following Eligibility for participating in the Tender. The Bidders should enclose documentary evidence for fulfilling the Eligibility in the Technical Bid. If a bidder fails to enclose the documentary proof for eligibility, their bid will be summarily rejected.

4.1 Eligibility		
	Eligibility Conditions	Documentary Proof to be submitted
1	The Bidder / OEM shall be a Company registered in India under the Indian Companies Act 1956 / Partnership Firm / Sole Proprietorship Firm and existing for the past 3 years as on 31.03.2015.	The Bidder shall provide the Certificate of Incorporation for Registered Companies, Partnership Deed for Partnership Firms / VAT or Service Tax Registration Certificate for Sole Proprietorship Firms.
2	OEM shall be a Company registered in India under the Indian Companies Act 1956 and existing for the past 3 years as on 31.03.2015.	OEM shall provide the Certificate of Incorporation
3	UPS Systems - OEMs or their authorized Dealer / Distributor are only eligible to Bid. Letter of Authorisation from the <u>UPS</u> Manufacturer to represent their product for this Tender.	Copy of Manufacturing Licence with Manufacturing capacity for UPS Systems shall have to be submitted by the UPS Systems OEMs. Letter of Authorisation from the manufacturer of UPS Systems to represent their product for this Tender in the prescribed format shall have to be submitted by the Authorized Dealer / Distributor of the OEMs. Copy of Manufacturing Licence with Manufacturing capacity of the UPS Systems OEM shall have to be submitted by the Authorized Dealer / Distributor.
4	OEM should have 3 years of existence in the manufacture of UPS Systems or Authorised dealer / Distributor of UPS Systems as on 31.03.2015.. Authorized Dealer / Distributor should have 3 years of existence in the UPS Systems business as on 31.03.2015..	Copy of Purchase Order issued in the name of Bidder dated prior to 31.03.2012 and Copy of Completion / Performance Certificate for the above Purchase Order should be submitted.
5	The Bidder shall have an Annual Turnover of Rs.10 Crores or above in the last three Successive Audited Financial Years.	Copies of the Audited Annual Reports containing the Balance sheets and Profit and Loss account for the last 3 Audited Financial years. (2011-12, 2012-13 & 2013-14)
6	The Bidder shall have executed Single order for supply, installation and commissioning of UPS Systems for a	Relevant copies of Purchase Orders obtained and completion/ performance certificate obtained from the customers

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	Eligibility Conditions	Documentary Proof to be submitted
	value of at least Rs. 50 Lakhs and above for any Government Departments / Organisations / Public Sector Undertakings in India in the last 3 years.	
7	The bidders should have atleast one service centre in each region (North, East, South and West as given in the Tender Document) with a total of minimum 10 service centres in the State. The service centre may be run by Manufacturer or Franchise or authorised distributors/dealers.	In case of OEM's / Bidder's Own Service Centre, copies of the land-line telephone bills or valid rent agreement as on tender opening date shall be submitted as a proof for availability of the service centres & Incase of OEM's /Bidder Franchisee Service centre copy of the valid agreement entered into between the Franchisee and the OEM / Bidder
8.	Bidder / Manufacturer should have ISO 9001:2008 certified manufacturing facility and ISO 14001:2004 certified for handling hazardous products.	Should submit copy of <u>VALID</u> ISO 9001:2008 and ISO 14001:2004 Certificates.
9	The bidder should have office in Chennai.	Copies of the land-line telephone bills / rental agreement dated before 31.03.2015. should be submitted as a proof for availability of the office in Chennai.

5. SPECIFICATIONS

5.1 UPS Systems

Code	Item Description	Make	Approximate Qty
LIA600-30	600 VA LIA UPS – 30 Minutes	Reputed Make	1

Parameter	Details
Capacity	600VA LINE INTERACTIVE UPS with 0.6 PF
Back-up Time	30 Minutes
Inverter Type	MOSFET (Make and current capacity to be specified by the tenderer)
INPUT	
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE
Frequency with Tolerance	50 Hz, +/- 3 Hz
Battery (Secondary Source)	Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time at 360W Resistive Load. Minimum 390 VAH rating of battery should be given and also Sealed Maintenance Free (SMF) type – AH and no. of Batteries shall be suitably selected for required backup time at 360W Resistive Load.
Battery Storage Box	Batteries should be provided inside the UPS Systems.
OUTPUT	
Nominal Voltage	Output Nominal Voltage–220V/230V AC, Output Voltage Regulation (+/-1%)
Frequency	50 Hz, +/- (0.2) HZ
Waveform	Quasi/Pure Sine wave (Square wave not accepted)
Transfer time	Transfer Time less than 6 msec, typical
Load power factor	0.6 lag to unity
OTHER / GENERAL DATA	
Automatic Voltage Regulators	To be provided
Ambient Temperature range	To be specified by the tenderer
Protections	Fuses for Input, Over load, over, under Voltage, short circuit, battery reverse, Lightning Protection
Indications	Mains ON, Inverter ON, Battery Low, Overload.
Alarms (Audio)	To be provided for low voltage condition for battery.
Auto cut OFF	The UPS systems output should be cut off during no load conditions (Preferable)
Power sockets	3 Nos. (5 Amps. capacity)
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.
Inverter Efficiency	Minimum 75%
Total Harmonic Distortion	Maximum 40%
Overload capacity	Overload Capacity withstand for 5 minutes at 110% load (660 Watts for Resistive Load /400Watts for Combinational Load).
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)
ISO	ISO Certification Mandatory for the Manufacturing Process

Code	Item Description	Make	Approximate Qty
LIA1000-30 LIA1000-60 LIA1000-120 LIA1000-240	1 KVA LIA UPS	Reputed Make	Each 1 No

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Parameter	Details
Capacity	1KVA LINE INTERACTIVE UPS
Back-up Time	For code LIA1000-30 – 30 minutes For code LIA1000-60 – 60 minutes For code LIA1000-120 –120 minutes For code LIA1000-240 –240 minutes
Inverter Type	MOSFET (Make and current capacity to be specified by the tenderer)
INPUT	
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE
Frequency with Tolerance	50 Hz, +/- 3 Hz
Battery (Secondary Source)	Sealed maintenance free(SMF) type-AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 60% Resistive Load. Minimum VAH rating of battery bank should be as given below:- 30 Minutes – 750 VAH 60 Minutes – 1500 VAH 120 Minutes – 3000 VAH 240 Minutes – 6000 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.
Battery Storage Box	Internal or External Storage Box / MS-Rack for housing the Batteries.
OUTPUT	
Nominal Voltage	Output Nominal Voltage–220V/230VAC, Output Voltage Regulation (+/- 1%)
Frequency	50 Hz, +/- (0.2) Hz
Waveform	Quasi/Pure Sine wave (Square wave not accepted)
Transfer time	Transfer Time < 6 ms
Load power factor	0.6 lag to unity
OTHER / GENERAL DATA	
Automatic Voltage Regulators	To be provided
Ambient Temperature range	To be specified by the tenderer
Protections	Fuses for Input, Over load, over, under Voltage, short circuit, battery reverse, Lightning Protection
Indications	Mains ON, Inverter ON, Battery Low, Overload.
Alarms (Audio)	To be provided for low voltage condition for battery.
Auto cut OFF	The UPS systems output should be cut off during no load conditions (Preferable)
Power sockets	3 Nos. (5 Amps. capacity)
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.
Inverter Efficiency	Minimum 75%
Total Harmonic Distortion	Maximum 40%
Overload	Overload withstand for 5 minutes at 110% load (1100 Watts Resistive Load / 660 Watts Combinational Load).
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)
ISO	ISO Certification Mandatory for the Manufacturing Process

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Code	Item Description	Make	Approximate Qty
OL1000-30 OL1000-60 OL1000-120 OL1000-240	1 KVA On-Line UPS	Reputed Make	Each 1 No

Parameter	Details
Capacity	1 KVA TRUE ONLINE UPS
Back-up Time	For code OL1000-30 – 30 minutes For code OL1000-60 – 60 minutes For code OL1000-120 – 120 minutes For code OL1000-240 – 240 minutes
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)
INPUT	
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE
Input power factor	> 0.9
Frequency with Tolerance	50 Hz, +/- 3 Hz
Battery (Secondary Source)	Sealed maintenance free(SMF) type-AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Minimum VAH rating of battery bank should be as given below:- 30 Minutes – 790 VAH 60 Minutes – 1580 VAH 120 Minutes – 3160 VAH 240 Minutes – 6320 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.
DC Bus voltage	To be specified by the tenderer
Make of the Battery	Specify the Manufacturer Make, Model and enclose the technical sheet. The make and AH of the battery submitted for evaluation only will be accepted
Battery Storage Box	External Storage Box / MS-Rack for housing the Batteries.
OUTPUT	
Nominal Voltage	230 AC, Single Phase (+/-1%)
Frequency	50 Hz, +/- (0.2) Hz
Waveform	Pure Sine wave
Load power factor	0.7 lag to unity
<u>OTHER / GENERAL DATA</u>	
Overload Capacity	Overload Capacity – Withstand for 5 minutes at 110% load (2200Watts Resistive Load / 1540Watts Combinational Load)
Total Harmonic Distortion	< 4% for Linear load and 5% for non linear load
Efficiency	> 80%
Ambient Temperature	To be specified by the tenderer (Preferable upto 50 Degree Celsius)
Duty Cycle	Continuous
Cooling	Forced air cooling
Protections	1) Input, Output – Low and High

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Parameter	Details
	2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse 5) Short circuit 6) Over load 7) Lightening
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications
Power sockets	3 Nos. of 5A Sockets.
Trip Conditions	Over load, Over, Under voltage, Short Circuit Indications Mains ON, Inverter ON, Battery Low, Overload.
Alarms (Audio)	For extreme battery low voltage.
Meters	Meters – AC Volt Meter for input and output. DC Volt Meter, Frequency Meter for output in Analog / Digital Mode.
Manuals	Operating and User manual to be Provided
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)
ISO	ISO Certification Mandatory for the Manufacturing Process
SNMP card	Provisions should be available

Code	Item Description	Make	Approximate Qty
OL2000-30 OL2000-60 OL2000-120 OL2000-240	2 KVA On-Line	Reputed Make	Each 1 No
Capacity	2 KVA TRUE ONLINE UPS		
Back-up Time	For code OL2000-30 – 30 minutes For code OL2000-60 – 60 minutes For code OL2000-120 – 120 minutes		

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Code	Item Description	Make	Approximate Qty
OL2000-30 OL2000-60 OL2000-120 OL2000-240	2 KVA On-Line	Reputed Make	Each 1 No
Inverter Type		For code OL2000-240 – 240 minutes IGBT (Make and current capacity to be specified by the tenderer)	
INPUT			
Mains Voltage Regulation		150 - 270V AC, SINGLE PHASE	
Input power factor		> 0.9	
Frequency with Tolerance		50 Hz, +/- 3 Hz	
Battery (Secondary Source)		Sealed maintenance free(SMF) type – AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Minimum VAH rating of battery bank should be as given below:- 30 Minutes – 1580 VAH 60 Minutes – 3160 VAH 120 Minutes – 6320 VAH 240 Minutes – 11640 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.	
DC Bus voltage		To be specified by the tenderer	
Make of the Battery		Specify the Manufacturer Make, Model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted.	
Battery Storage Box		External Storage Box / MS-Rack for housing the Batteries.	
OUTPUT			
Nominal Voltage		230V AC, Single Phase (+/-1%)	
Frequency		50 Hz, +/- (0.2) Hz	
Waveform		Pure Sine wave	
Load power factor		0.7 lag to unity	
OTHER / GENERAL DATA			
Overload Capacity		Overload Capacity: Withstand for 5 Minutes at 110% load (2200Watts Resistive Load / 1540Watts Combinational Load).	
Total Harmonic Distortion		< 4% for Linear load and 5% for non linear load	
Efficiency		> 80%	
Ambient Temperature		To be specified by the tenderer (Preferable upto 50 Degree Celsius)	
Duty Cycle		Continuous	
Cooling		Forced air cooling	
Protections		1) Input, Output – Low and High 2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse 5) Short circuit 6) Over load	

Tender Ref.: ELCOT/Proc/OT/32821/UPS Systems/2015-16

Code	Item Description	Make	Approximate Qty
OL2000-30 OL2000-60 OL2000-120 OL2000-240	2 KVA On-Line	Reputed Make	Each 1 No
	7) Lightening		
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications		
Power sockets	Power Sockets – 3 Nos. of 5A Socket.		
Trip Conditions	Over load, Over, Under voltage, Short Circuit Indications Mains ON, Inverter ON, Battery Low, Overload.		
Alarms (Audio)	For extreme battery low voltage.		
Meters	Meters – AC Volt Meter for input and output. DC Volt Meter, Frequency Meter for output in Analog / Digital Mode.		
Manuals	Operating and User manual to be Provided		
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers		
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.		
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)		
ISO	ISO Certification Mandatory for the Manufacturing Process		
SNMP card	Provisions should be available		

Code	Item Description	Make	App. Qty
OL3000-30 OL3000-60 OL3000-120 OL3000-240	3 KVA On-Line	Reputed Make	Each 1 No.
Parameter		Details	
Capacity		3 KVA TRUE ONLINE UPS	
Back-up Time		For code OL3000-30 – 30 minutes For code OL3000-60 – 60 minutes For code OL3000-120 – 120 minutes For code OL3000-240 – 240 minutes	
Inverter Type		IGBT (Make and current capacity to be specified by the tenderer)	
INPUT			
Mains Voltage Regulation		150 - 270V AC, SINGLE PHASE	
Input power factor		> 0.9	
Frequency with Tolerance		50 Hz, +/- 3 Hz	

Tender Ref.: ELCOT/Proc/OT/32821/UPS Systems/2015-16

Code	Item Description	Make	App. Qty
Battery (Secondary Source)	<p>Sealed maintenance free(SMF) type-AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load.</p> <p>Minimum VAH rating of battery bank should be as given below:-</p> <p>30 Minutes – 2350 VAH 60 Minutes – 4700 VAH 120 Minutes – 9400 VAH 240 Minutes – 18800 VAH</p> <p>Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.</p>		
DC Bus voltage	To be specified by the tenderer		
Make of the Battery	Specify the Manufacturer Make, Model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted.		
Battery Storage Box	External Storage Box / MS-Rack for housing the Batteries.		
OUTPUT			
Nominal Voltage	230V AC, Single Phase (+/-1%)		
Frequency	50 Hz, +/- (0.2) Hz		
Waveform	Pure Sine wave		
Load power factor	0.7 lag to unity		
OTHER / GENERAL DATA			
Overload Capacity	Overload Capacity – Withstand for 5 Minutes at 110% Load (3300 Watts Resistive Load / 2310 Watts Combinational Load).		
Total Harmonic Distortion	< 4% for Linear load and 5% for non linear load		
Efficiency	> 80%		
Ambient Temperature	To be specified by the tenderer (Preferable upto 50 Degree Celsius)		
Duty Cycle	Continuous		
Cooling	Forced air cooling		
Protections	1) Input, Output – Low and High 2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse 5) Short circuit 6) Over load 7) Lightening		
Mobility	All UPS system fitted with castors for Mobility		
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications		
Power sockets	Power Sockets – 6 Nos. of 5A Socket.		
Trip Conditions	Over load, Over, Under voltage, Short Circuit Indications Mains ON, Inverter ON, Battery Low, Overload.		
Alarms (Audio)	For extreme battery low voltage.		
Meters	AC Volt Meter for input and out put, DC Volt Meter, Frequency Meter, AC load current for output in Analog / Digital mode		
Manuals	Operating and User manual to be Provided		
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers		
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.		
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.		

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Code	Item Description	Make	App. Qty
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)		
ISO	ISO Certification Mandatory for the Manufacturing Process		
SNMP card	Provisions should be available		

Code	Item Description	Make	Approximate Qty
OL5000-30 OL5000-60 OL5000-120 OL5000-240	5 KVA On-Line	Reputed Make	Each 1 No

Parameter	Details
Capacity	5 KVA TRUE ONLINE UPS
Back-up Time	For code OL5000-30 – 30 minutes For code OL5000-60 – 60 minutes For code OL5000-120 – 120 minutes For code OL5000-240 – 240 minutes
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)
INPUT	
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE
Input power factor	> 0.9
Frequency with Tolerance	50 Hz, +/- 3 Hz
Battery (Secondary Source)	Sealed maintenance free(SMF) type – AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Minimum VAH rating of battery bank should be as given below:- 30 Minutes – 3950 VAH 60 Minutes – 7900 VAH 120 Minutes – 15800 VAH 240 Minutes – 31600 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries

Tender Ref.: ELCOT/Proc/OT/32821/UPS Systems/2015-16

Parameter	Details
	shall be suitable selected for required backup time.
DC Bus voltage	To be specified by the tenderer
Make of the Battery	Specify the Manufacturer Make, Model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted.
Battery Storage Box	External Storage Box / MS-Rack for housing the Batteries.
OUTPUT	
Nominal Voltage	230V AC, Single Phase (+/-1%)
Frequency	50 Hz, +/- (0.2) Hz
Waveform	Pure Sine wave
Load power factor	0.7 lag to unity
OTHER / GENERAL DATA	
Overload Capacity	Overload Capacity: Withstand for 5 Minutes at 110% load (5500 Watts Resistive Load / 3850 Watts for Combinational Load).
Total Harmonic Distortion	< 4% for Linear load and 5% for non linear load
Efficiency	> 85%
Ambient Temperature	To be specified by the tenderer (Preferable upto 50 Degree Celsius)
Duty Cycle	Continuous
Cooling	Forced air cooling
Protections	1) Input, Output – Low and High 2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse 5) Short circuit 6) Over load 7) Lightening
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications
Power sockets	1 No.32 Amps. Capacity Terminal Block
Trip Conditions	Over load, Over, Under voltage, Short Circuit Indications Mains ON, Inverter ON, Battery Low, Overload.
Alarms (Audio)	For extreme battery low voltage.
Meters	Meters – AC Volt Meter for input and output. DC Volt Meter, Frequency Meter for output in Analog / Digital Mode.
Manuals	Operating and User manual to be Provided
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6

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Parameter	Details
	years)
ISO	ISO Certification Mandatory for the Manufacturing Process
SNMP card	Provisions should be available

UPS POWER CABLING WITH ACCESSORIES

UPS POWER CABLING WITH ACCESSORIES (ISI mark cable and accessories) - Finolex / Standard/ Anchor / Any other reputed make. (SPECIFICATIONS to be given clearly to the UPS suppliers.

Bidders who quote for the UPS should quote for the items without fail.

Item Code	ITEM DESCRIPTION	
	2 KVA UPS	
1151a	Input Isolator with MS Enclosure 15-A - 2 pole	
1151b	Input Wiring: Cable: 2.5 Sq.mm - 2 Run & 1.5 Sq.mm 1Run	
1151c	Output MCB with Enclosure 10 A - Double Pole	
1151d	Output Wiring Cable Details 2.5Sq.mm - 3 Run	
	3.0 KVA UPS	
1152a	Input Isolator with MS Enclosure 32-A - 2 pole	
1152b	Input Wiring: Cable: 4.0 Sq.mm - 2 Run & 2.5 Sq.mm 1Run	
1152c	Output MCB with Enclosure - 15 A - Double Pole	
1152d	Output Wiring Cable Details 2.5Sq.mm - 3 Run	
	5.0 KVA UPS	
1153a	Input Isolator with MS Enclosure 40-A - 2 pole	
1153b	Input Wiring: Cable: 6.0 Sq.mm - 2 Run & 4.0 Sq.mm 1Run	
1153c	Output MCB with Enclosure 25 A - Double Pole	
1153d	Output Wiring Cable Details 4.0Sq.mm - 3 Run	
	Switches & Sockets	
1156	5A-3pin Switches & Sockets 1 No with Gang box	
1157	5A-3pin Switches & Sockets 1 set (1 set = 3 Nos.) with Gang box	
1158	15A Plug & Socket with box	
	Earthing	
1159	Earthing for 2.0 kva & 3.0 kva	
1160	Earthing for 5.0 kva	
1161	Earthing Wiring with 4.0 sqmm	
1162	Earthing wiring with 6 sq.mm cable for 5.0 kva.	

Code	Item Description	Make	Approximate Qty
1121/ 1122/ 1123/ 1124	10 KVA On-Line 30 / 60 / 120 / 240 minutes backup	Reputed Make	1

Parameter	Tender Specification						
Capacity /Technology	10KVA True On-Line UPS with DSP Based Inverter Monitoring and IGBT Charger						
Back-Up Time	1/2 Hour						
Type	IGBT (make and current capacity to be specified by the tenderer)						
<u>INPUT</u>							
Voltage Mains (Primary Source)	440V 3Ph -20%, +10%						
Input Power factor	> 0.9						
Frequency	50 Hz						
Battery (Secondary Source)							
	<u>Sealed maintenance free(SMF) type</u> 1.AH and no. of batteries shall be suitably selected for backup time of 30 mins.(minimum) at 10KW resistive Load / 7 KW Combinational load. 2.Minimum VAH rating of battery bank should be as given below: <table><tr><td><u>30 mts</u></td><td><u>60 mts</u></td><td><u>120 mts</u></td></tr><tr><td>7950</td><td>15950</td><td>31950</td></tr></table>	<u>30 mts</u>	<u>60 mts</u>	<u>120 mts</u>	7950	15950	31950
<u>30 mts</u>	<u>60 mts</u>	<u>120 mts</u>					
7950	15950	31950					
DC Bus Voltage	To be specified by the tenderer. Make and number of batteries, each battery capacity and voltage are to be specified.						
Make of the battery	Specify the manufacturer, model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted						
Battery Storage Box/Rack	<u>Battery Storage Rack</u> External Battery Storage Rack for housing the batteries with safety provisions to be supplied along with the UPS system						

<u>OUTPUT</u>	
Nominal Voltage	230V - AC Single Phase

Voltage Regulation	$\pm 1\%$
Frequency	50 Hz
load regulation	$\pm 2\%$
Variation in Frequency	$\pm 0.2\text{HZ}$
Load Power factor	0.7 lag to unity
Waveform	Pure Sine Wave
<u>Other/General Data</u>	
Overload Capabilities	120% load (12KW)for 5min.
	110% load (11KW)for 10min
Overall Efficiency	Greater than 85% at full load
Total Harmonic Distortion	Less than 3% for 100% linear loads
Ambient Temperature range	-10 to 50deg Cel
Inverter efficiency	>90%
Duty Cycle	Continuous
Cooling	Forced air cooling
Protections	1) Input, output - Low and High
	2.) Battery low
	3.) Input, output – Breaker
	4.) Battery – Fuse
	5.) Short circuit
	6.) Over load
	7) Temperature over load
	8) Transient
	9) surge
Controls	In-Built Static bypass switch to be provided
Trip Conditions	Over load, over/under voltage, low battery
Indications and	Mains ON, Inverter ON, battery Low, Overload
Alarms (Audio)	For extreme battery low voltage
(both Remote & panel)	
Meters	Display showing AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,
Input cable and output cable:	To be provided as per the standards
Manuals	Operating and user manual to be provided

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Name Plate in the UPS	Riveted/ Printed Name and Sr.No.
<u>Communication and Management</u>	
Interface ports	DB-9 RS-232, Smart-Slot , USB
Input cable and output cable	Proper rated input cable – 3mtrs x 5 runs and output cable – 3 mtrs. x 3 runs with PVC pipe to be provided
Emergency Switch OFF	To be Provided
Isolation Transformer	Isolation transformer must be provided Internal/ External
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years) ISO Certification Mandatory for the Manufacture Process and ISO 14001:2004 certified for handling hazardous products.
Software	Software for automatic shut down of the system compatible with Windows and Linux. Technical details of the software to be enclosed (Preferable)
SNMP card	Provisions should be available

Wiring Materials for 10 KVA UPS Systems

Product Code	Item Description
1151a	Input Isolator with MS Enclosure – 32A – 4 Pole
1152b	Input Wiring: Cable: 6.0 Sq.mm – 5 Run
1153c	Output MCB with Enclosure - 50A - Double Pole
1154d	Output Wiring Cable Details 10.0Sq.mm - 2 Run & 6.0 sq.mm 1Run
1155	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box
1156	5A-3pin Switches & Sockets 1 set of 3 nos. with Gang box
1157	15A Plug & Socket with box
1158	Earthing: Earthing for 10 kva - Providing separate Isolated Earth pit. Earth pit - 2' x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among

Product Code	Item Description
	the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)
1159	Earthing copper wiring with 6 sq.mm cable 10 kva ups

Code	Item Description	Make	Approximate Qty						
1125/ 1126/ 1127 / 1128	15 KVA On-Line 30 / 60 / 120 / 240 minutes backup	Reputed Make	1						
Parameter		Tender Specification							
Capacity /Technology		15KVA True On-Line UPS with DSP Based In- verter Monitoring and IGBT Charger							
Back-Up Time		1/2 Hour							
Type		IGBT (make and current capacity to be spe- cified by the tenderer)							
<u>INPUT</u>									
Voltage Mains(Primary Source)		440V 3Ph -20%, +10%							
Input Power factor		> 0.9							
Frequency		50 Hz							
Battery (Secondary Source)									
		<u>Sealed maintenance free(SMF) type</u> 1.AH and no. of batteries shall be suitably se- lected for backup time of 30 mins.(minimum) at 15KW resistive Load / 10.5KVA Combina- tional load. 2.Minimum VAH rating of battery bank should be as given below: <table><tr><td><u>30 mts</u></td><td><u>60 mts</u></td><td><u>120 mts</u></td></tr><tr><td>11950</td><td>23950</td><td>47950</td></tr></table>		<u>30 mts</u>	<u>60 mts</u>	<u>120 mts</u>	11950	23950	47950
<u>30 mts</u>	<u>60 mts</u>	<u>120 mts</u>							
11950	23950	47950							
DC Bus Voltage		To be specified by the tenderer. Make and number of batteries, each battery capacity and voltage are to be specified.							
Make of the battery		Specify the manufacturer, model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted							

Battery Storage Box/Rack	Battery Storage Rack External Battery Storage Rack for housing the batteries with safety provisions to be supplied along with the UPS system
<u>OUTPUT</u>	
Nominal Voltage	230V - AC Single Phase
Voltage Regulation	$\pm 1\%$
Frequency	50 Hz
load regulation	$\pm 2\%$
Variation in Frequency	$\pm 0.2\text{HZ}$
Load Power factor	0.7 lag to unity
Waveform	Pure Sine Wave
<u>Other/General Data</u>	
Overload Capabilities	120% load (18KW)for 5min.
	110% load (16.5KW)for 10min
Overall Efficiency	Greater than 85% at full load
Total Harmonic Distortion	Less than 3% for 100% linear loads
Ambient Temperature range	-10 to 45 deg Cel
Inverter efficiency	>90%
Duty Cycle	Continuous
Cooling	Forced air cooling
Protections	1) Input, output - Low and High
	2.) Battery low
	3.) Input, output – Breaker
	4.) Battery – Fuse
	5.) Short circuit
	6.) Over load
	7) Temperature over load
	8) Transient
	9) surge
Controls	In-Built Static bypass switch to be provided
Trip Conditions	Over load, over/under voltage, low battery
Indications and	Mains ON, Inverter ON, battery Low, Overload
Alarms (Audio)	For extreme battery low voltage

(both Remote & panel)	
Meters	Display showing AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,
Input cable and output cable:	To be provided as per the standards
Manuals	Operating and user manual to be provided
Name Plate in the UPS	Riveted/ Printed Name and Sr.No.
<u>Communication and Management</u>	
Interface ports	DB-9 RS-232, Smart-Slot , USB
Input cable and output cable	Proper rated input cable – 3mtrs x 5 runs and output cable – 3 mtrs. x 3 runs with PVC pipe to be provided
Emergency Switch OFF	To be Provided
Isolation Transformer	Isolation transformer must be provided Internal/ External
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years) ISO Certification Mandatory for the Manufacture Process and ISO 14001:2004 certified for handling hazardous products.
Software	Software for automatic shut down of the system compatible with Windows and Linux. Technical details of the software to Be enclosed (Preferable)
SNMP card	Provisions should be available

Wiring Materials For 15 KVA UPS Systems

Product Code	Item Description
1160a	Input Isolator with MS Enclosure – 40A – 4 Pole
1160b	Input Wiring: Cable: 10.0 Sq.mm – 5 Run
1160c	Output MCB with Enclosure - 63A / 80A - Double Pole
1160d	Output Wiring Cable Details 25.0Sq.mm - 2 Run & 10.0 sq.mm 1Run
1161	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box
1162	5A-3pin Switches & Sockets 1 set of 3 nos. with Gang box
1163	15A Plug & Socket with box
1164	Earthing: Earthing for 15 kva - Providing separate Isolated Earth pit. Earth

Product Code	Item Description
	pit - 2' x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)
1165	Earthing copper wiring with 10 sq.mm cable 10 kva ups

Code	Item Description	Make	Approximate Qty
1129 / 1130 / 1131 / 1132	20 KVA On-Line 30 / 60 / 120 / 240 minutes backup	Reputed Make	1

Parameter	Tender Specification						
Capacity /Technology	20KVA True On-Line UPS with DSP Based In- verter Monitoring and IGBT Charger						
Back-Up Time	1/2 Hour						
Type	IGBT (make and current capacity to be spe- cified by the tenderer)						
<u>INPUT</u>							
Voltage Mains(Primary Source)	440V 3Ph -20%, +10%						
Input Power factor	> 0.9						
Frequency	50 Hz						
Battery (Secondary Source)							
	<u>Sealed maintenance free(SMF) type</u> 1.AH and no. of batteries shall be suitably se- lected for backup time of 30 mins.(minimum) at 20KW resistive Load / 14 KVA Combina- tional load. 2.Minimum VAH rating of battery bank should be as given below: <table><tr><td><u>30 mts</u></td><td><u>60 mts</u></td><td><u>120 mts</u></td></tr><tr><td>15950</td><td>31950</td><td>63950</td></tr></table>	<u>30 mts</u>	<u>60 mts</u>	<u>120 mts</u>	15950	31950	63950
<u>30 mts</u>	<u>60 mts</u>	<u>120 mts</u>					
15950	31950	63950					
DC Bus Voltage	To be specified by the tenderer. Make and num- ber of batteries, each battery capacity and voltage are to be specified.						
Make of the battery	Specify the manufacturer, model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only						

	will be accepted
Battery Storage Box/Rack	<u>Battery Storage Rack</u> External Battery Storage Rack for housing the batteries with safety provisions to be supplied along with the UPS system
<u>OUTPUT</u>	
Nominal Voltage	230V - AC Single Phase
Voltage Regulation	$\pm 1\%$
Frequency	50 Hz
load regulation	$\pm 2\%$
Variation in Frequency	$\pm 0.2\text{HZ}$
Load Power factor	0.7 lag to unity
Waveform	Pure Sine Wave
<u>Other/General Data</u>	
Overload Capabilities	120% load (24 KW)for 5min.
	110% load (22 KW)for 10min
Overall Efficiency	Greater than 85% at full load
Total Harmonic Distortion	Less than 3% for 100% linear loads
Ambient Temperature range	-10 to 45 deg Cel
Inverter efficiency	>90%
Duty Cycle	Continuous
Cooling	Forced air cooling
Protections	1) Input, output - Low and High
	2.) Battery low
	3.) Input, output – Breaker
	4.) Battery – Fuse
	5.) Short circuit
	6.) Over load
	7) Temperature over load
	8) Transient
	9) surge
Controls	In-Built Static bypass switch to be provided
Trip Conditions	Over load, over/under voltage, low battery
Indications and	Mains ON, Inverter ON, battery Low, Overload

Alarms (Audio)	For extreme battery low voltage
(both Remote & panel)	
Meters	Display showing AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,
Input cable and output cable:	To be provided as per the standards
Manuals	Operating and user manual to be provided
Name Plate in the UPS	Riveted/ Printed Name and Sr.No.
<u>Communication and Management</u>	
Interface ports	DB-9 RS-232, Smart-Slot , USB
Input cable and output cable	Proper rated input cable – 3mtrs x 5 runs and output cable – 3 mtrs. x 3 runs with PVC pipe to be provided
Emergency Switch OFF	To be Provided
Isolation Transformer	Isolation transformer must be provided Internal/ External
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years) ISO Certification Mandatory for the Manufacture Process and ISO 14001:2004 certified for handling hazardous products.
Software	Software for automatic shut down of the system compatible with Windows and Linux. Technical details of the software to Be enclosed (Preferable)
SNMP card	Provisions should be available

Wiring Materials For 20KVA UPS Systems

Product Code	Item Description
1166a	Input Isolator with MS Enclosure – 63A – 4 Pole
1166b	Input Wiring: Cable: 16.0 Sq.mm – 5 Run
1166c	Output MCB with Enclosure - 100A - Double Pole
1166d	Output Wiring Cable Details 25.0Sq.mm - 2 Run & 10.0 sq.mm 1Run

Product Code	Item Description
1167	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box
1168	5A-3pin Switches & Sockets 1 set with Gang box
1169	15A Plug & Socket with box
1170	Earthing: Earthing for 20 kva - Providing separate Isolated Earth pit. Earth pit - 2' x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)
1171	Earthing copper wiring with 16 sq.mm cable 20 kva ups

NOTE

Applicable for all Above 5.1 UPS Systems

SNMP Requirement

Real time monitoring UPS status.
Display of all UPS status.
Warning notification via e-mail, trap
Event and data log stored
Multi monitoring by SNMP S/W

Add on item:-

SNMP card

6. Bid Preparation and Submission

6.1 Cost of Bidding

The Bidders shall bear all costs associated with the preparation and submission of Bids. ELCOT will in no way be responsible or liable for these charges/costs incurred regardless of the conduct or outcome of the bidding process.

6.2 Tender Document Fee

a) The Tender Documents may be directly purchased from ELCOT on payment of fees as mentioned in the Tender Schedule. The Tender document cost may be paid

by way of Demand Draft / Banker's Cheque in favour of Electronics Corporation of Tamil Nadu Limited, payable at Chennai.

b) Alternatively the Tender Documents can be downloaded free of cost from the websites mentioned in the Tender Schedule. The Tender document fee is waived for such downloaded documents.

6.3 Earnest Money Deposit (EMD)

- a) An EMD amount as specified in the Tender Schedule shall be paid by way of Demand Draft or Banker's Cheque drawn in favour of “Electronics Corporation of Tamil Nadu Limited” payable at Chennai. The EMD in the form of Bank Guarantee is not acceptable.
- b) The EMD of the unsuccessful Bidders will be returned at the expense of the Bidders within a reasonable time consistent with the rules and regulations in this behalf. The EMD amount held by ELCOT till it is refunded to the unsuccessful Bidders will not earn any interest thereof.
- c) The EMD amount of the Successful Bidder can be converted as part of the Security Deposit (SD) for successful execution of the work and will be returned only after the successful fulfilment of the Contract.
- d) The EMD amount will be forfeited by ELCOT, if the Bidder withdraws the bid during the period of its validity specified in the tender or if the Successful Bidder fails to sign the contract or the Successful in bidder fails to remit Security Deposit within the respective due dates.

6.4 Letter of Authorisation

A letter of Authorisation from the Board of Directors / appropriate authority authorising the Tender submitting authority or a Power of Attorney shall be submitted in the Technical bid, otherwise the Bids will be summarily rejected.

6.5 Two Part Bidding

Bidders shall examine all Instructions, Terms and Conditions and Technical specifications given in the Tender document. Failure to furnish information required by the Bid or submission of a Bid not substantially responsive in every respect will be at the Bidders risk and may result in rejection of Bids. Bidders shall strictly submit the Bid as specified in the Tender, failing which the bids will be non-responsive and will be rejected.

6.5.1 Technical Bid (Envelope-A)

- a) The Technical Bid format as given in the Tender shall be filled, signed and stamped on all pages. Errors if any shall be attested by the Bidders. The Technical Bid shall not contain any indications of the Price otherwise the Bid will be summarily rejected.
- b) The Technical Bids shall be typed, signed and stamped in all pages by the authorised signatory of the Bidder. Any alternations, deletions or overwriting shall be attested with full signature of the authorised signatory.
- c) The Technical Bid with supporting documents and the EMD cover shall then be put in a separate cover and sealed appropriately. The Technical Bid cover shall be superscribed as **“Technical Bid (Envelope-A) for supply of UPS Systems– Tender Ref.: ELCOT/PROC/OT/32821/ UPS Systems/2015-16 due on 3.9.2015 @ 3.00 PM”**. The “FROM Address” and “TO Address” shall be clearly written in the cover otherwise the Bid is liable for rejection.
- d) The bidders shall submit the details of make and model of the items offered against the tender requirement.

6.5.2 Price Bid Form (Envelope-B)

- a) All the Price items as asked in the Tender shall be filled in the Price Bid Format as given in the Tender.
- b) The price quoted by the Bidder shall include cost and expenses on all counts viz. cost of equipment, materials, tools/ techniques/ methodologies, manpower, supervision, administration, overheads, travel, lodging, boarding, in-station & outstation expenses, etc and any other cost involved

in the supply and commissioning.

- c) The Price Bid Form shall not contain any conditional offers or variation clauses, otherwise the Bids will be summarily rejected.
- d) The Prices quoted shall be only in **INDIAN RUPEES (INR) only**. The Prices shall be quoted in Figures and Words. The tender is liable for rejection if Price Bid contains conditional offers.
- e) The Price Bid shall be typed and shall be signed by the authorised signatory in all pages. Any alterations, deletions or overwriting shall be attested with full signature of the authorised signatory.
- f) The cost quoted by the Bidder shall be kept firm for a period specified in the Tender from the date of opening of the tender. The Bidder shall keep the Price firm during the period of Contract including during the period of extension of time if any. Escalation of cost will not be permitted during the said periods or during any period while providing services whether extended or not for reasons other than increase of duties / taxes payable to the Governments in India within the stipulated delivery period. The Bidders shall particularly take note of this factor before submitting the Bids.
- g) The Price Bid shall be placed in a separate cover (Envelope-B) and sealed appropriately. The Price Bid cover shall be superscribed as **“Technical Bid (Envelope-A) for supply of UPS Systems– Tender Ref.: ELCOT/PROC/OT/32821/ UPS Systems/2015-16 due on 3.9.2015 @ 3.00 PM”**. The “FROM” address and “TO” address shall be written without fail otherwise the Price Bid is liable for rejection.

6.6 Bid closing date and time

The Bids shall be submitted not later than the date and time specified in the Tender Schedule or Corrigendum if published. Hence the Bidders shall be cautious to submit the Bids well in advance to avoid disappointments. The BIDS received after the DUE DATE AND TIME will be summarily rejected.

6.6.1 Outer Cover

The Technical Bid cover including EMD cover (Envelope-A) and Price Bid cover

(Envelope-B) shall then be put in a single outer cover and sealed appropriately by use of sealant. The outer cover shall be superscribed as **“Technical Bid (Envelope-A) for supply of UPS Systems– Tender Ref.: ELCOT/PROC/OT/32821/ UPS Systems/2015-16 due on 3.9.2015 @ 3.00 PM”**. The “FROM” address and “TO” address shall be written without fail otherwise the Technical Bid is liable for rejection.

6.7 Mode of Submission of Bids

- a) The Bids shall be submitted strictly as specified in the Tender document. The Bids shall be dropped in the Tender box kept at ELCOT, MHU Complex II Floor, 692, Anna Salai, Nandanam, Chennai- 600 035 on or before the due date and time. The Bids will not be received personally.
- b) If the Bidder prefers to submit the Bid by post, the Bidder shall ensure that the Bid reaches the Managing Director, ELCOT on or before the due date and time. ELCOT will not be liable or responsible for any postal delay or any other delay whatsoever.
- c) If any Bid is received after Due Date and Time or unsealed or disorderly submitted or received by Facsimiles (FAX), the Bid will be treated as non responsive.

6.8 Modification and withdrawal of Bids

The Bids once submitted cannot be modified or amended or withdrawn. No documents would be supplemented after submission of Bids unless specifically asked by ELCOT.

7. Tender opening and Evaluation

7.1 Technical Bid Opening

The Technical Bid will be opened on the date and time as specified in the Tender schedule in the presence of those Bidders, who choose to be present against production of an authorisation letter from the Bidding authority. A maximum of two representatives for each Bidder would be allowed to attend the Tender opening.

7.2 Tender Validity

The offer submitted by the Bidders shall be valid for a minimum period of 90 days from the date of opening of the Tender. The Rate Contract will be valid for 1 year from the date of signing of the contract or agreement/date of release of the first Purchase order. However ELCOT reserves the right to extend or short close the Tender validity period if situation warrants to benefit the Government.

7.3 Initial Scrutiny

At the time of Technical Bid Opening, Initial Bid scrutiny will be conducted and incomplete details as given below will be treated as non-responsive and the Bids will be rejected summarily.

If Tenders are;

- not submitted in two parts as specified in the Tender
 - received WITHOUT EMD amount
 - not submitted the Sample as per the tender document
- All responsive Bids will be considered for further evaluation.

The decision of ELCOT will be final in this regard.

7.3.1 Technical Bid Scrutiny

1. Initial Bid scrutiny will be conducted and incomplete details as given below will be treated as non-responsive.

If Tenders are:-

1. received without the Letter of Authorisation
2. found with suppression of details

3. with incomplete information, subjective, conditional offers
4. submitted without support documents as per the Eligibility Criteria and Evaluation Criteria
5. non-compliance of any of the clauses stipulated in the Tender
6. Lesser validity period
7. not found with OEM's compliance statement and the Technical Leaflets of the quoted models.

The decision of ELCOT will be final in this regard.

7.4 Clarifications by ELCOT

When deemed necessary, ELCOT may seek bonafide clarifications on any aspect from the Bidder. However, that would not entitle the Bidder to change or cause any change in the substance of the Bid or price quoted. During the course of Technical Bid evaluation, ELCOT may seek additional information or historical documents for verification to facilitate decision making. In case the Bidder fails to comply with the requirements of ELCOT as stated above, such Bids may at the discretion of ELCOT, shall be rejected as technically non-responsive.

7.5 Tender Evaluation

7.5.1 Suppression of facts and misleading information

- During the Bid evaluation, if any suppression or misrepresentation of is brought to the notice of ELCOT. ELCOT shall have the right to reject the Bid and if after selection, ELCOT would terminate the contract, as the case may be, will be without any compensation to the Bidder and the EMD / SD, as the case may be, shall be forfeited.
- Bidders shall note that any figures in the proof documents submitted by the Bidders for proving their eligibility is found suppressed or erased, ELCOT shall have the right to seek the correct facts and figures or reject such Bids.
- It is up to the Bidders to submit the full copies of the proof documents to meet out the criteria. Otherwise, ELCOT at its discretion may or may not consider such documents.
- The Tender calls for full copies of documents to prove the Bidder's experience and capacity to undertake the project.

7.5.2 Technical Bid Evaluation

- a) A Tender Scrutiny Committee will examine / scrutinise the Technical Bids against the Eligibility Criteria and Evaluation Criteria given in the Tender document. The evaluation will be conducted based on the support documents submitted by the Bidders. The documents which did not meet the eligibility criteria in the first stage of scrutiny will be rejected in that stage itself and further evaluation will not be carried out for such bidders. The eligible Bidders alone will be considered for further evaluation.
- b) The sample submitted will be evaluated by ELCOT / User Department for the tender specification as given in the Scope of work to select the technically qualified bidder. The Bidder along with their OEM shall come for evaluation on the prescribed date. In case the Bidder and the OEM are not representing for Sample Evaluation in the prescribed time, their sample will be treated as rejected.
- c) The bidders have to submit their samples as per the terms specified in **“9.1 Sample Submission Clause”**. Bids without submission of samples are liable to be rejected. On receipt of the samples, ELCOT's technical team would benchmark them with the Microsoft Windows latest and BOSS Linux Operating System. Necessary drivers and supporting software shall be provided by the vendor. Only the systems which pass the Linux evaluation test will be allowed to take part in the price bid.
- d) For those Bidders who have already worked or working with ELCOT, their previous performance in ELCOT would be the mandatory criteria for selection. If any unsatisfactory performances of those Bidders are found, their Bids will be straight away rejected.

The Unsatisfactory performance is defined as

- 1. Non responsiveness after getting the Purchase order
- 2. Delay in supply, installation of the ordered items etc.
- 3. Lack of communication about the delay in deliveries, Installation etc.
- 4. Poor warranty support etc.,
- 5. Not executing the Contract.

6. Not submitting the Security Deposit in the stipulated time.

7.5.3 Price Bid Evaluation

a)The Price Bids of the Technically Qualified Bidders alone will be opened and evaluated. The Price Bid shall include all expenses towards this Tender. The Price Bids of the Technically Qualified Bidders will be opened in the presence of the Technically Qualified Bidders who are present at ELCOT. The Bidders or their authorised representatives will be allowed to take part in the Price Bid Opening.

b)All the taxes indicated in the Price Bid will be taken for the Price Bid evaluation as per the Tamil Nadu Transparency in Tender Rules 2000 with latest amendments.

c)As this is a rate contract, the following method of price evaluation will be adopted.

- The Price Bid Evaluation shall include all Customs Duty, Central Excise Duty and Value Added Tax (VAT) as part of the price as detailed below:

- In evaluation of the price of an imported item, the price shall be determined inclusive of the Customs duty with Counter Veiling Duty (CVD).

- As evaluation of the price of item is subject to excise duty, the price shall be determined inclusive of such excise duty.

- In respect of VAT, where all the bidders are from within the State of Tamil Nadu or where all the bidders are from outside the State of Tamil Nadu, the VAT will be included in the price bid evaluation.

(OR)

Where the bidders are from the State of Tamil Nadu as well as from outside the State of Tamil Nadu, the Value Added Tax (VAT) shall be excluded, but Central Sales Tax (CST) shall be included for evaluation.

d)The bidder shall quote for the tendered items as well as for all the add-on-items mentioned in the tender document. **Partial bid is allowed.** Bidder has to offer for both Linux and Windows OS Flavours for the respective tendered items. The prices will be evaluated as follows and the decision of ELCOT will be the final.

e)The total cost excluding applicable Local Taxes and including all other duties and charges (Such as Excise Duty, Customs Duty, Installation Charges etc., as per the guidelines stated above) of individual items will be taken for Price Bid evaluation. Though the 4th and 5th year Annual Maintenance Charges are not included in the price bid evaluation, the L1 Bidders have to match the lowest AMC Charges for the 4th and 5th year quoted by other Bidders.

f)The Technically Qualified Bidders will be negotiated to match L1 Price. If more than one Bidder matches the L1 Price, then order will be placed more than one Bidder, who matches the L1 Price. However, preference will be given to the L1 Bidder. The L1 Bidder will be given an order value more than the other Bidders, who match the L1 Price. The decision of ELCOT will be the final.

g)All the Bidders, who are selected after the Price Bid evaluation will be called as Successful Bidders.

h)If the Tender ends with only one Successful Bidder, the value of the order may be restricted to the monthly licensed manufacturing capacity of the Bidder and remaining quantity may be tendered.

7.6 Negotiations

Negotiations will be conducted with all the Successful Bidders for improvement in the Scope of Work, Specification, further reduction in price and advancement of delivery schedule.

7.7 Award of Contract

- Total quantity will be apportioned among the L1 Bidder and other Bidders who have agreed to match L1 rate, as per the provisions of Tamil Nadu Transparency in Tenders Act, 1998 and the Tamil Nadu Transparency in Tenders Rules, 2000 and Terms and Conditions of the Tender.
- No dispute can be raised by any Bidder who Bid has been rejected and no claims will be entertained or paid on this account.

7.8 ELCOT reserves the right to:

- 1.Negotiate with the Bidder whose offer is the lowest evaluated price for further reduction of prices.
- 2.Insist on quality / specification of materials to be supplied.

- 3.Modify, reduce or increase the quantity requirements to an extent of the tendered quantity as per the provisions of Tamil Nadu Transparency in Tenders Act 1998 and Tamil Nadu Transparency in Tenders Rules, 2000.
- 4.Change the list of areas of supply locations from time to time based upon the requirement of the purchase.
- 5.Ask other qualified Bidders to match the L1 price as this is a rate contract tender.
- 6.reallocate the quantity to other Bidder, if delivery performance of the Bidder is not as per the Schedule.
- 7.inspect the bidders' factory before or after placement of orders and based on the inspection,
- 8.modify the quantity ordered.
- 9.withhold any amount for the deficiency in the service aspect of the ordered items supplied to the customers.

8. Execution of Work

8.1 Acceptance of Tender and Withdrawals

The final acceptance of the tender is entirely vested with ELCOT who reserves the right to accept or reject, any or all of the tenders in full or in parts without assigning any reason whatsoever. The Tender Accepting Authority may also reject all the tenders for reasons such as change in Scope, Specification, lack of anticipated financial resources, court orders, calamities or any other unforeseen circumstances. After acceptance of the Tender by ELCOT, the Successful Bidder shall have no right to withdraw their tender or claim higher price.

8.2 Letter of Acceptance (LOA)

After acceptance of the Tender by ELCOT, a Letter of Acceptance (LOA) will be issued to the Successful Bidder(s) by ELCOT. Under this rate contract, ELCOT has the right to issue LOA to more than one bidder.

8.3 Payment of Security Deposit (SD)

The successful Bidder will be required to remit a Security Deposit (SD) equivalent to **five percent** of the value of the order, inclusive of EMD by way of Demand Draft payable at Chennai or in the form of unconditional irrevocable Bank Guarantee valid for 15 months from the date of Letter of Acceptance / Bank Guarantee. The SD shall be submitted within 20 days from the date of Letter of Acceptance. The SD furnished by the Successful Bidder in respect of the tender will be returned to them after successful fulfilment of work. The Security Deposit will be refunded to the Successful Bidder only after successful completion of the Purchase Order. The Security Deposit held by ELCOT till it is refunded to the Successful Bidder will not earn any interest thereof.

The Security Deposit will be forfeited if the Successful Bidder withdraws the Bid during the period of Bid validity specified in the Tender or if the Bidder fails to sign the contract.

8.4 Execution of Contract

- a) The Successful Bidder shall execute a Contract in the non-judicial Stamp Paper of the required amount bought in Tamil Nadu only in the name of

the Bidder within 20 days from the date of Letter of Acceptance issued by ELCOT with such changes/modifications as may be indicated by ELCOT at the time of execution on receipt of confirmation from ELCOT.

- b) The Successful Bidder shall not assign or make over the contract, the benefit or burden thereof to any other person or persons or body corporate for the execution of the contract or any part thereof without the prior written consent of ELCOT. ELCOT reserves its right to cancel the purchase order either in part or full, if this conditions is violated. If the Successful Bidder fail to execute the Contract within the stipulated time in the tender, the EMD/SD of the Successful Bidder will be forfeited and their tender will be held as non-responsive.
- c) The expenses incidental to the execution of the Contract shall be borne by the Successful Bidder.
- d) The conditions stipulated in the Contract shall be strictly adhered to and violation of any of the conditions will entail termination of the contract without prejudice to the rights of ELCOT and ELCOT also have the right to recover any consequential losses from the Successful Bidder.

8.5 Release of Purchase Order

After execution of the Contract and payment of Security Deposit, “**Firm Purchase Order**” for the supply and commissioning of Tendered items will be issued to the Successful Bidder by ELCOT. The supply and payment will be based on the Purchase Order(s) issued from time to time.

8.6 Refund of EMD

The EMD amount paid by the Successful Bidder(s) will be adjusted towards Security Deposit payable by them. If the Successful Bidder submits Security Deposit for the stipulated value in full by way of Bank Guarantee, the EMD will be refunded. The EMD amount of the Unsuccessful Bidder will be refunded after finalisation and issue of Firm Purchase Order to the Successful Bidder.

8.7 Release of SD

The Security Deposit will be refunded to the Successful Bidder on completion of entire supply subject to satisfaction of ELCOT. Such completion would be arrived at when the entire quantity is supplied by the Bidder as per the Contract and as per Purchase Order(s) issued by ELCOT from time to time.

8.8 Forfeiture of EMD and SD

- a) If the successful Bidder fails to act according to the tender conditions or backs out, after the tender has been accepted, the EMD will be forfeited to ELCOT.
- b) If the Successful Bidder fails to remit the SD, the EMD remitted by him will be forfeited to ELCOT and the tender will be held void.
- c) If the Successful Bidder fails to act up on to the tender conditions or backs out from the Contract, the SD mentioned above will also be forfeited by ELCOT.

8.9 Termination of Contract

8.9.1 Termination for default

- a) ELCOT may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of 7 days, sent to the Successful Bidder, terminate the contract in whole or part, (i) if the Successful Bidder fails to deliver any or all of the goods within the time period(s) specified in the Contract, or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by ELCOT; or (ii) if the Successful Bidder fails to perform any of the obligation(s) under the contract; or (iii) if the Successful Bidder, in the judgement of ELCOT, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract.

- b) In the event ELCOT terminates the Contract in whole or in part, ELCOT may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the Successful Bidder shall be liable to ELCOT for any additional costs for such similar goods. However, the Successful Bidder shall continue the performance of the contract to the extent not terminated.

8.9.2 Termination for Insolvency

ELCOT may at any time terminate the Contract by giving written notice with a notice period of 7 days to the Successful Bidder, if the Successful Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to ELCOT.

8.9.3 Termination for Convenience

ELCOT may by written notice, with a notice period of seven days sent to the Successful Bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ELCOT's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. On termination, the Successful Bidder is not entitled to any compensation whatsoever.

8.10 Execution of Work Order

The Successful Bidder shall nominate and intimate ELCOT, an Account Manager for Single Point of Contact (SPOC), who shall be responsible for effective delivery of work complying with all the terms and conditions. The Successful Bidder shall ensure that the Account Manager fully familiarises with the Tender Conditions, Scope of Work and deliverables.

8.11 Assigning of Tender whole or in part

The successful Bidder shall not assign or make over the contract, the benefit or burden thereof to any other person or persons or body corporate. The Bidder shall not under-let or sublet to any person(s) or body corporate for the execution of the contract or any part thereof without the prior written consent of ELCOT.

8.12 Liquidated Damages (LD)

A penalty will be levied at the rate specified in the Contract Format for non-fulfilment of delivery schedule subject to the force Majeure conditions. Even If the work is not completed in full beyond this period, such performance may entail termination of contract and black listing of the Successful Bidder from participating in any of the ELCOT's Tenders. This alone will not relieve the Successful Bidder and the difference in cost of the items purchased through other Technically qualified Bidders or any other alternative sources will be recovered from the Successful Bidder.

8.13 Penalty for Non-Fulfilment of Tender

A penalty will be levied at the rate specified in the Contract Format in the event of non-fulfilment or non-observance of any of the conditions stipulated in the Contract, Terms and Conditions and Work Order.

8.14 Other Conditions

- a) The final decision would be based on the technical capacity and pricing of the Bidder. ELCOT does not bind itself in selecting the bidder offering lowest prices.
- b) ELCOT reserves the right not to accept lowest price, to reject any or all the tenders without assigning any reason, to relax or waive any of the conditions stipulated in the terms and conditions of tender as deemed necessary in the best interest of ELCOT for good and sufficient reasons.

8.15 Arbitration and Jurisdiction

(a) In case of any dispute, the matter will be referred to a Sole Arbitrator to be appointed by the Managing Director of ELCOT in accordance with the "Arbitration and Conciliation Act 1996". The arbitration shall be held in Chennai, India and the language English only.

(b) Subject to the above, the Courts at Chennai alone only shall have jurisdiction in the matter.

8.16 Other Documents to be included:

1. Copy of ESI Registration or necessary Exemption Letter for ESI Registration shall be submitted.
2. Copy of EPF Registration or necessary Exemption Letter for ESI Registration shall be submitted.

9. Scope of Work

9.1 Sample Submission

- a) For each item quoted in the Tender, the samples shall be submitted indicating the make, model number and brochures / specification of the items for benchmark testing by ELCOT as per Appendix-3 of the Tender. OEM's quoted Make & Model and Brochure shall be made available in the OEM's Websites till the completion of supply. The OEM / Bidder shall ensure that the quoted Model shall be available for at least one year from the date of opening of the technical bid documents.
- b) The bidders have to submit the samples on or before the Tender Due Date, during the office hours, as per the date indicated in this tender document. Necessary Linux Driver shall be installed in the Samples. The Software shall work under Linux OS in the same manner it works under any other Operating System environment.
- c) Samples shall be delivered at the address mentioned in the Tender Schedule along with the INTERNAL TEST REPORT (**Format Prescribed in Appendix-7**) carried out by the OEM / Bidder as per this Tender specifications duly certified by the OEM / Bidder's Quality Inspection Officer with signature and designation.
- d) If the samples are not delivered within the time limit specified in the Tender, it would be treated as non-responsive to the Tender conditions and the Bids is liable for rejection.
- e) The OEM or the Bidder shall depute technical team to coordinate with ELCOT Officials for the evaluation of the Samples as per the time schedule given to them. The time schedule given for evaluation shall be adhered to by each Bidder, failing which ELCOT will treat them as non-responsive and liable for rejection of their Bid.

9.2 Compliance with Technical Specification

The OEM's compliance to the Technical Specifications submitted in the Technical Bid of the Bidder will be scrutinised. Further, the Samples will be tested in line with the compliance submitted by the OEM. The Samples which do not meet the above criteria will be rejected. The whole evaluation exercise would be done in the presence of the bidders in a transparent manner.

9.3 Analysis of Samples

9.3.1 General

- a) If the equipment supplied for evaluation meets the tender specifications, it would be treated that the equipment had passed the “specifications test”. If the specifications are below the tender specifications, then the equipment would be treated as “failed” in the “specifications test”. The bidders shall take utmost care to bring in the samples which shall be equal to or better than the specifications given in the tender documents.
- b) ELCOT reserves the right to reject a sample if it is found that it does not meet the specifications. In such cases the bidder would be treated as “failed” in this test. However, ELCOT reserves its right to offer one last opportunity to the bidder to produce another sample for evaluation, say within a short period of 2-3 days. Such a sample would be evaluated again to find out whether the bidder gets “pass” in this test.
- c) Offering this additional opportunity is solely at the discretion of ELCOT. ELCOT would be pleased to provide such an opportunity ONLY if public interest (healthy competition) demands such a step. In the normal course such an additional opportunity would not be given to the bidders.

9.3.2 Linux compliance test for UPS SYSTEMS

- a) All the samples will be tested for BOSS Linux compliance for the Tender Specifications. If a Sample fails in any of the parameters, then it would be treated as “FAILED” in the “Linux Compatibility Test”. The Bidders must provide the necessary Drivers.
- b) Linux compatibility test may or may not be carried out for the bidders who have produced Linux certification. However if they become Successful, their product

will be tested for Linux compatibility before issuing order.

- c) If the bidder applied for Linux certification, bidder shall produce necessary documents related to this. For these bidders, Linux compatibility will be tested.

9.4 Pre-despatch Inspection

- a) The Successful Bidder shall intimate the readiness of the ordered items for Pre-Despatch Inspection by ELCOT indicating the quantity after internal testing along with test report. The intimation for Pre-Despatch Inspection to ELCOT shall be made 10 days in advance before the stipulated delivery schedule.
- b) The Pre-despatch inspection will be carried out by the Authorised Agency appointed by ELCOT and / or representatives of ELCOT on receipt of the above details.

9.4.1 Specification Test during Pre-Despatch Inspection

- a) Specification conformity will be tested for the ordered items as per technical specification given in the tender document.
- b) The Ordered Item shall be supplied in full as per the ordered configuration for acceptance testing. No Ordered item, which falls short of the technical specification, will be taken up for acceptance testing under any circumstances, however the Successful Bidder can offer a better specification than the one finalised through the tender and the same will be accepted for testing.
- c) Linux Operating System shall be installed in all the hardware as per specifications. Necessary drivers for Linux OS shall be supplied in CD-ROM/DVD media.

9.4.2 Temperature Test and Drop test

- a) The items will be kept at the Thermal chamber to check configuration variation at the ambient conditions of 0-45 degree Centigrade.

- b) Drop test shall be conducted on all the six surfaces of the packaging with the systems and peripherals packed inside by dropping the same from a height of one meter. Performance of the hardware shall be checked after conducting such tests with the help of diagnostic software. The packaging shall be able to withstand the test without any damage or malfunction.
- c) Temperature and drop test will be conducted on at least one unit out of every 100 units supplied in each configuration.

9.4.3 Predespatch Acceptance

- a) 100% Physical Verification will be done by ELCOT. List of Sl. No., with make of each item shall be given including internal part of UPS Systemsetc.
- b) The items shall give the same performance results as given during technical evaluation benchmarking.
- d) Any item got rejected during acceptance test shall be re-offered for acceptance test within 2 days.
- e) The items which are accepted after testing, shall be sealed inside the carton box under the joint signatures of the representative(s) of ELCOT and vendor's representative and then sent along with the packing list giving serial numbers and part numbers of all possible items and copy of the acceptance test report to the specific location.

9.5 Supply, installation and Commissioning

- a) **Delivery Schedule:**

For Locations:-

- 1 to 50 locations – Within 42 days from the date of Purchase Order.
- 51 to 100 locations – Within 49 days from the date of Purchase Order.
- 101 to 200 locations – Within 56 days from the date of Purchase Order.
- 201 and above locations – Within 72 days from the date of Purchase Order.

For Quantity:-

- 1 to 100 Nos. - Within 42 days from the date of Purchase Order.
- 101 to 500 Nos. - Within 49 days from the date of Purchase Order.
- 501 to 1000 Nos. - Within 56 days from the date of Purchase Order.

1001 and above Nos. - Within 72 days from the date of Purchase Order.

The Delivery Schedule shall be taken from Location / Quantity whichever is higher.

NOTE: Based on any urgent requirement of Government Departments, Delivery Schedule may be reduced by ELCOT after the discussions and concurrence from the Successful Bidders.

- b) In view of making the first delivery quickly, the Successful Bidder shall keep minimum quantity of the UPS Systems as mentioned in the Letter of Acceptance ready for delivery within 15 days from the date of issue of Letter of Acceptance.
- c) The Successful Bidders after obtaining the Consignee address shall visit the sites to assess the readiness of the site for installation. A report in this respect shall be submitted to ELCOT within 10 days. ELCOT may advise the customer to prepare the site ready for installation.
- d) However the Customer is responsible for the site preparation before the scheduled installation dates.
- e) The Successful Bidder is responsible for all unpacking, assemblies, wiring, installations, cabling between hardware units and connecting to power supplies. The Successful Bidder will test all hardware operations and accomplish all adjustments necessary for successful and continuous operation of the hardware at all the installation sites.
- f) The Successful Bidder selected for various equipments to be installed at single user premises shall co-ordinate with each other and prepare a list where delivery is planned by all the parties, so that installation and handing over can be carried out to the consignees suitably / simultaneously by all the parties. The Successful Bidder must send the proposed delivery schedule to each consignee and to ELCOT well in advance.

- g) The supply and installation of ordered items along with necessary operational and user manuals / drawings, circuit diagram, etc., shall be made available in the Tender document. The Successful Bidder shall be responsible for commissioning of the items supplied by preparing interfacing / integrating with purchaser's equipment / accessories / software supplied by other vendors.
- h) After successful Installation, commissioning and handing over of the ordered items to the consignees the Successful Bidder must obtain signed installation certificate in the Installation Certificate Format (Format will be provided to the Successful Bidder along with the Letter of Acceptance) along with Sample test results duly certified by the respective consignee on the installed items.
- i) The Successful Bidder shall send status report in the format prescribed in such intervals as may be required by ELCOT from time to time till the execution of the entire order. Status Report Format will be provided to the Successful Bidder along with the Letter of Acceptance.
- j) The Successful Bidder shall undertake to supply spares for the maintenance of the supplied items for period of FIVE years.
- k) The details of the service centre representatives responsible for attending the installation, warranty services at each consignee site, name and designation of the contact person and centre in-charge, higher level in-charge who is responsible to oversee the service centres, person to whom complaints can be made in case the service provided by any centre is not satisfactory, phone, fax, mobile numbers & email address must be provided well in advance to each consignee and to ELCOT. The above shall be complied by the Successful Bidders. Service Centre details shall be made available in the Websites of the OEM / Bidder.
- l) The Successful Bidder shall stick ELCOT HELP DESK LOGO / Holograms etc as per the directions of ELCOT and as per sample, in a prominent place on all the items delivered.
- m) In the rare event of non-acceptance of delivery items by the user, the vendor shall immediately report ELCOT for suitable directions.

9.6 Minimum Stock Maintenance

- α) Some occasions may arise that the UPS Systems may be required to be delivered within a short period of 24 hours to the Purchaser/s. In such occasions, it may be very difficult to arrange shipment of the items from the vendor premises due to the routine formalities. To tackle such conditions, the Successful Bidder shall maintain an ex-stock of about 10 units of all items in the Successful Bidder's premises and intimate the same to ELCOT within 20 days from the date of Letter of Acceptance. Upon issuance of notice from ELCOT, the successful Bidder shall supply, install and commission the ex-stock at the customer premises.
- β) No financial commitment will be given by ELCOT for maintaining the ex-stock items.
- χ) At any point of time, the successful Bidder shall ensure the minimum ex-stock level. The successful bidder shall also ensure that the short fall of 10 number shall be replenished within 7 days from the date of delivery of the items from the minimum stock.
- δ) ELCOT reserves the right to Inspect the Minimum stock level at any point of time and may impose a penalty of 20% of the cost of the equipments which are short of the specified qty. If the Successful Bidder fails to maintain the minimum stock level in three instances during the Rate contract period, ELCOT reserves the right to terminate the RC Contract with the Successful Bidder and the Successful Bidder will be declared as non performer which may not permit the Successful Bidder in participating tenders floated by ELCOT in future, for the next three years.

9.7 Warranty Clause

The warranty clause during the free warranty period of 3 years and extended warranty of 4th and 5th year would be applicable as follows. However, the Warranty Clause is not applicable for Consumable Items such as Ribbon Cartridges and Print Heads.

- a) All the Tendered items shall be supplied to the customer site free from breakages, malfunctions, breakdowns or manufacturing defects. If any of the items are found defective due to manufacturing defect or design fault or transit damage occurred at the time of supply or within one month from the date of installation, the items in full shall be replaced.
- b) All the materials and components of the Tendered items shall be covered with a replacement warranty of 36 months from the date of signing of installation report of the ordered items. The successful Bidder shall be liable to make good the loss by replacing the items or other accessories found defective during the warranty period.
- c) The Successful Bidder shall give an undertaking to maintain the spares of all the hardware items of 2% of the total quantity ordered.
- d) During the warranty period, the complaints received from the customers shall be attended as below.
 - 1. If the complaint is received during the forenoon (up to 2 PM), the complaint shall be attended on the same day.
 - 2. If the complaint is received during the afternoon (after 2 PM), the complaint shall be attended on the next day. If next day is the declared Holiday, the complaint shall be attended in the next working day under normal circumstances. In emergency situations or urgent requirement of the customer, the complaint shall be attended within 2 hours on the same day.
 - 3. All the complaints shall be attended from the nearest service centres.
 - 4. All the complaints shall be rectified within 2 working days excluding the date of complaint.
 - 5. **Penalty during warranty period:-** If the complaints are not rectified within the stipulated period as mentioned in class 9.7.d.4 an equivalent standby shall be supplied till rectification. A penalty of 0.25% on the value of the item will be charged per day till the equipment is put on working condition, in case the standby item is not supplied.

6. Monthly Report on the periodical / preventive maintenance of the supplied items shall be sent to ELCOT by e-mail.
7. Weekly breakdown maintenance report shall be sent to ELCOT with details of RECTIFICATION.

9.8 Contact details for service support - Stickers

The Successful Bidder shall deliver the systems with stickers pasted on it containing the Service persons details with escalation matrix for the service facility. The successful bidder shall get the approval for the sticker before deploying in the field.

ELCOT will conduct post delivery inspection for the systems delivered and if it is found that the Successful Bidder is not pasting the stickers will be liable for declaring as the non performer. If this deviation is found in three instances, the Successful Bidder will be declared as the non performer and will not be permitted in participating in ELCOT tenders for a period of next 3 years, minimum.

9.9 Call Centre Facility

The Successful Bidders shall set up a call centre supported by a web based application for this purpose and may provide access to ELCOT. All the complaints as well as rectification details shall be recorded in the call centre software. The features of the Call Centre will be discussed mutually. In case, the Purchaser/s directly calls ELCOT, provision shall be made for ELCOT to register the complaints. Any failure to the Warranty conditions would attract a penalty under non-fulfilment of Tender conditions.

9.10 Buy back of the old UPS Systems

The Purchaser/s may have old **UPS Systems** for disposal either in working condition or may not be in working condition. The make of the UPS Systems may be different from the Successful bidder's make purchased during the past years from various sources. However the Successful Bidder shall agree to buy back the old UPS Systems available with the Purchaser/s. The payment towards the buyback may be paid by the Successful Bidder directly to the Purchaser/s or to ELCOT depending upon the instructions from ELCOT.

9.11 Resident Service Engineer

The Successful Bidders who are given Purchase Order for 200 UPS Systems shall post one qualified and trained engineer at the disposal of ELCOT to be deployed at the ELCOT's Branch Offices in the Districts or any location designated by ELCOT to provide service support during the period of 3 years warranty period. This is in addition to the normal After Sales Support to be provided by the supplier under the terms and conditions of the tender. In case of failure by the successful bidder ELCOT reserves the rights to cancel the orders placed on them and engage such service Engineers. All the expenses related with such activity will be recovered from the Successful Bidder. ELCOT also reserves the right to reject / not considering the bidder for future tenders floated by ELCOT.

10. Payment Clause

- a) 100% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, after the receipt of funds from the Purchaser, on installation, commissioning and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications on submission of an irrevocable Bank Guarantee for 5% of the cost of the ordered value valid for 40 months during the warranty period. (OR)
- b) 95% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, after the receipt of funds from the Purchaser, on installation, commissioning and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications and the balance 5% will be released to the supplier after completion of 3 years warranty period.
- c) However if the site is not ready within 15 days of delivery, 75% of total cost will be paid on submitting the proof of delivery and certificate from the customer that the site is not ready, after receipt of funds from the Purchaser and balance 25% total cost will be paid on installation, commissioning and handing over of the systems on submission of an irrevocable Bank Guarantee for 5% of the cost of the ordered value valid for 40 months during the warranty period.

- d) If the Purchaser is not issuing an SNR (Site Not Ready), the Successful Bidder may give an Undertaking to ELCOT stating that the Purchaser is not issuing an SNR. The 75% of total cost of the invoice will be made to the Successful Bidder after the receipt of funds from the Purchaser on verifying the same with the Purchaser.
- e) Bills will be honoured within 7 working days after submission of bills along with all supporting documents in complete shape. The Successful Bidder shall file relevant invoices online using the web based procurement software in operation at ELCOT.
- f) The Successful Bidder hereby agrees to get the refund of incentive, excise duty and proportionate sales tax from authorities concerned and pass it on to Purchaser(s) if the Government or any other appropriate agency reduces the Excise duty or Sales tax or give incentive of any type retrospectively after supplying the Ordered items failing which action will be taken to recover the balance amount from the Successful Bidder under the Revenue Recovery Act or any other relevant act.
- g) Penalty amount if any, will be adjusted in the payment due to the Successful Bidder.
- h) All taxes and other levies imposed by Governments in India will be paid at actual as applicable.

Appendix-1 Model Form of Contract

(To be executed on a Rs. 20/- Non-Judicial Stamp Paper bought in Tamil Nadu by the Successful Bidder for the supply and commissioning of **UPS SYSTEMS** with Accessories and Software)

(NO FIGURES IN NUMERALS OR WORDS SHALL BE FILLED UP IN THIS SAMPLE FORM AT THE TIME OF SUBMISSION OF TENDER)

This CONTRACT is entered into at Chennai on the day of (Year) between Electronics Corporation of Tamil Nadu Limited, a wholly owned Government of Tamil Nadu Undertaking, a Company registered under the Indian Companies Act, 1956 and having its Registered office at 692, Anna Salai, Nandanam, Chennai- 600 035 herein after referred to as “ELCOT” (which term shall mean and include its Successors and permitted assigns) on behalf of Customer (s) to be communicated by ELCOT from time to time (herein after referred to as “Purchaser (s)”) and a Company registered under the Indian Companies Act, 1956 and having its Registered Office at hereinafter referred to as the “Successful Bidder” (which term shall mean and include its Successors and permitted assigns)

Whereas, ELCOT had floated a Rate Contract Tender vide Tender No. **ELCOT/PROC/OT/32815/UPS SYSTEMS/2015-16** for the supply, installation and commissioning of **UPS SYSTEMS** and related items and the Successful Tenderer has been selected as one of the suppliers in the Tender as per the following terms and conditions:-

1. This document on having been signed by both the parties shall constitute a binding contract between the parties and shall remain in force for a period of 37 months. But in the event of any breach of agreement at any time on the part of the Successful Bidder, the contract shall be determinable by ELCOT without compensation to the Successful Bidder. The contract may also be put to an end at any time by ELCOT upon giving seven days notice to the Successful Bidder.
2. The Successful Bidder agrees that in the event of failure of 10% or more of the vital components of the equipments occurring during the first three

year warranty period, ELCOT would have a right to blacklist them for any procurement through ELCOT for a period of three years from that date.

3. The Successful Bidder agrees to supply, install and commission the Bill of Materials detailed in ELCOT Tender **ELCOT/PROC/OT/32815/ UPS SYSTEMS /2015-16** after carrying out successfully all tests prescribed by the Purchaser(s) at an unit price plus applicable Taxes as indicated in Annexure to this Contract to the Purchaser(s) before the specified date. The price offered is firm and is not subject to enhancement on any ground.

4. a) **Delivery Schedule:**

For Locations:-

1 to 50 locations – Within 42 days from the date of Purchase Order.

51 to 100 locations – Within 49 days from the date of Purchase Order.

101 to 200 locations – Within 56 days from the date of Purchase Order.

201 and above locations – Within 72 days from the date of Purchase Order.

For Quantity:-

1 to 100 Nos. - Within 42 days from the date of Purchase Order.

101 to 500 Nos. - Within 49 days from the date of Purchase Order.

501 to 1000 Nos. - Within 56 days from the date of Purchase Order.

1001 and above Nos. - Within 72 days from the date of Purchase Order.

The Delivery Schedule shall be taken from Location/Quantity whichever is higher.

NOTE: Based on any urgent requirement of Government Departments, Delivery Schedule may be reduced by ELCOT after the discussions and concurrence from the Successful Bidders.

5. The price of the ordered items as per the Tender includes excise duty, Surcharges, Freight, Octroi, insurance, commissioning, and such other levies that may be applicable.

6. The goods or materials to be supplied under this contract are to be of the quality and of the sort mentioned in the ELCOT Tender document.

7. The goods or materials are to be delivered on F.O.R destination indicated by ELCOT/Purchaser(s) without any extra cost in such quantities or numbers contained in the purchase order to be issued by ELCOT from time to time. Any amendments to the orders in terms of quantities or delivery period etc., may

be incorporated on a mutually agreed basis. The delivery of goods to the destination is the responsibility of the Successful Bidder only. The goods supplied under the contract shall be covered for comprehensive insurance by the Successful Bidder till delivery and acceptance by the authority concerned.

8. ELCOT is entitled to change the list of consignee address from time to time based on the requirement of the purchaser(s). In this situation, the Successful Bidder shall not claim any additional charges except for any major amount involved which will be resolved mutually.

9. The goods sold under this agreement shall not be taken back. However any replacement necessitated, as part of the warranty commitments shall be carried out by the Successful Bidder and faulty parts/materials that arise out of such replacements shall be taken back by the Successful Bidder within a reasonable time.

10. If the supply, installation and commissioning of the Ordered items are not effected as specified in the purchase order, Purchaser(s) /ELCOT shall have the full authority to cancel the order and to take any such action that will be deemed fit in the circumstances.

11. In case of failure by the Successful Bidder to deliver goods or materials demanded from them, within the period specified for delivery or in case of goods or materials delivered by them, not being of the stipulated quality and specifications or in the case of goods or materials being delivered without a correct invoice in duplicate, ELCOT or anyone duly authorized by ELCOT shall have the power to reject any such goods or materials and to purchase from others instead of any goods or materials so rejected or not delivered. Unless the Successful Bidder shall themselves forthwith supply that shall be sufficient and satisfactory, any excess of cost so incurred by the Purchaser(s) over the contract price together with all charges and expenses attending the purchase shall be recoverable by ELCOT / Purchaser(s) from the Successful Bidder.

12. A penalty will be levied at the rate of 0.5% per week on the un-delivered portion of the material value subject to a maximum of 5% if the delivery has not been completed in full within the stipulated period. The delivery period will effect from the date of receipt of confirmed consignee address. Besides such

performance may entail back-listing of Successful Bidder. If the Successful Bidder fails to supply even after the lapse of one month after the stipulated date of delivery, then the orders/contracts are liable for cancellation and the EMD/ Security Deposit will be forfeited in addition to ELCOT reserving the right to blacklist the Successful Bidder for a period of three years from participating in ELCOT's tenders.

13. A Penalty for non-fulfilment or non-observance of tender conditions will be levied at 5% of the total value of the Purchase Order.

14. Notwithstanding anything contained in the penalty clause, ELCOT reserves the right to blacklist the Successful Bidder from taking part in any of the procurement operations of ELCOT for a minimum period of three years from the date of blacklisting for failure to carry out supply in time or according to the quality and quantity prescribed or any such similar reasons. This penalty shall be over and above all other penalties.

15. **WARRANTY**:- i) The materials or goods are to be given warranty for a period of 36 months, after installation and commissioning against any manufacturing defect and bad workmanship solely by the Successful Bidder irrespective of whether the same have been manufactured by them or not. The warranty period of 36 months will commence from the date of installation and commissioning of the ordered items after carrying out successfully the tests prescribed by Purchaser/(s) and installation in good working condition. A report of services attended on monthly basis must be submitted to ELCOT for each order during the warranty period.

ii) The Successful Bidder shall undertake to supply the spares for the Standard warranty and Extended Warranty Period of the offered items for the period of three years. If any manufacturing or other technical defects is/are found within 36 months from the date of installation, commissioning and handing over of the ordered items to Purchaser (s), they will have to be rectified or replaced free of cost by the Successful Bidder in good working condition.

(iii) If the complaints are not rectified within the stipulated period as mentioned in clause 9.7.d.4 of the tender conditions, an equivalent standby shall be supplied till

rectification. A penalty of 0.25% on the value of the item will be charged per day till the equipment is put on working condition, in case the standby item is not supplied.

(iv) The Successful Bidder agrees to provide comprehensive maintenance of the ordered items, which shall include preventive maintenance and corrective maintenance at the location specified by the Purchaser(s). The maintenance shall include replacement of all parts. The Ordered items, which are down, shall be restored in good working condition within 48 hours. Otherwise, the Successful Bidder shall be liable for a penalty of 10% per week of breakdown period on the costs of only those machineries, which are non-functional. The Purchaser(s) reserves right to terminate the maintenance contract in the event of unsatisfactory maintenance and claim damages for non-fulfillment of contract.

- 16) The Successful Bidder agrees to adhere to the 4th and 5th Year extended warranty cost which is not included in the price bid evaluation, and agrees to honour the Comprehensive warranty cost offered by them, in case the extended warranty for the 4th and 5th year is awarded to them.

17) PAYMENT TERMS:

a) 100% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, after receipt of funds from the Purchaser, on installation, commissioning and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications on submission of an irrevocable Bank Guarantee for 5% of the cost of the ordered value valid for 40 months during the warranty period. **(OR)**

95% of the total cost of ordered items will be paid by ELCOT on behalf of the Purchaser, after receipt of funds from the Purchaser, on installation, commissioning and handing over of the ordered items to the Purchaser, after testing all the software and fulfilling the technical specifications and the balance 5% will be released to the Successful Bidder after completion of 3 years warranty period.

- b) However if the site is not ready within 15 days of delivery, 75% of total cost will be paid on submitting the proof of delivery and certificate from the Purchaser that the site is not ready, after receipt of funds from the Purchaser and balance 25% total cost will be paid on installation, commissioning and handing over of the systems on submission of an irrevocable Bank Guarantee for 5% of the cost of the ordered value valid for 40 months during the warranty period.
- If the Purchaser is not issuing an SNR (Site Not Ready), the Successful Bidder may give an Undertaking to ELCOT stating that the Purchaser is not issuing an SNR. The 75% of total cost of the invoice will be made to the Successful Bidder, after receipt of funds from the Purchaser, on verifying the same with the Purchaser.
- c) Bills will be honoured within 7 working days after submission of bills along with all supporting documents in complete shape. The successful Bidder shall file relevant invoices online using the web based procurement software in operation at ELCOT.
- d) The Successful Bidder hereby agrees to get the refund of incentive, excise duty and proportionate sales tax from authorities concerned and pass it on to Purchaser(s) if the Government or any other appropriate agency reduces the Excise duty or Sales tax or give incentive of any type retrospectively after supplying the Ordered items failing which action will be taken to recover the balance amount from the Successful Bidder under the Revenue Recovery Act or any other relevant act.
- e) Penalty amount if any, will be adjusted in the payment due to the Successful Bidder..
- f) All taxes and other levies imposed by Governments in India will be paid at actual as applicable.
18. The contract or any part share of interest in it is not be transferred or assigned by the successful Bidder directly or indirectly to any person or persons whomsoever without the prior written consent of the Purchaser(s).
19. Neither the Purchaser(s)/ELCOT nor the Successful Bidder shall be liable to the other for any delay or failure in the performance of their respective

obligations due to causes or contingencies beyond their reasonable control such as

- i) Natural phenomena including but not limited to earthquakes, floods and epidemics.
- ii) Acts of any Government authority domestic or foreign including but not limited to war declared or undeclared, priorities and quarantine restrictions.
- iii) Accidents or disruptions including, but not limited to fire, explosions, break down of essential machinery or equipment, power and water shortages.

20. The following documents shall be deemed to form and be read and construed as part of this Contract.

- a) Technical Specifications
- b) Tender Terms and Conditions
- c) Amendments issued by ELCOT for the Tender document
- d) Corrigendum / Clarifications issued by ELCOT for the Tender Document
- e) Detailed final offer of the Successful Bidder
- f) Purchase Order(s) issued by ELCOT from time to time
- g) Correspondence made by ELCOT to the Successful Bidder from time to time

during the period of the contract.

Wherever the offer conditions furnished by the Successful Bidder are at variance with conditions of this contract or conditions stipulated in the purchase order, the latter shall prevail over the offer conditions furnished by the Successful Bidder.

21. Unless otherwise provided in the agreement, any notice, request, consent or other communication given or required to be given hereunder shall be given by mailing the same by registered mail, postage prepaid, return receipt requested in the case of the Successful Bidder to the Purchaser(s) at their respective addresses and set forth above or with other addresses and to the attention of such other person or persons as may hereafter be designated by like notice hereunder and any such notice sent by post shall be deemed to have been served on the date when in the ordinary course of post, it would have been delivered at the address to which it was sent.

22. Termination of Contract

22.1 Termination for default

- a) ELCOT may without prejudice to any other remedy for breach of contract, by written notice of default with a notice period of seven days, sent to the Successful Bidder, terminate the contract in whole or part, (i) if the Successful Bidder fails to deliver any or all of the goods within the time period(s) specified in the Contract, or fails to supply the items as per the Delivery Schedule or within any extension thereof granted by ELCOT; or (ii) if the Successful Bidder fails to perform any of the obligation(s) under the contract; or (iii) if the Successful Bidder, in the judgement of ELCOT, has engaged in fraudulent and corrupt practices in competing for or in executing the Contract.
- b) In the event of ELCOT terminating the Contract in whole or in part, ELCOT may procure, upon terms and in such manner as it deems appropriate, the goods and services similar to those and delivered and the Successful Bidder shall be liable to ELCOT for any additional costs for such similar goods. However, the Successful Bidder shall continue the performance of the contract to the extent not terminated.

22.2 Termination for Insolvency

ELCOT may at any time terminate the Contract by giving written notice with a notice period of 7 days to the Successful Bidder, if the Successful Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to ELCOT.

- 22.3 Termination for Convenience:-** ELCOT may by written notice, with a notice period of seven days sent to the Successful Bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for ELCOT's convenience, the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective. On termination, the Successful Bidder is not entitled to any compensation whatsoever.

23. Any notice to the Successful Bidder shall be deemed to be sufficiently served, if given or left in writing at their usual or last known place of abode or business.

24. ELCOT reserves the right to cancel the order(s) and to terminate the contract in the event of short performance or non performance of the Successful Bidder.

25. **Arbitration Clause:-**

Except as otherwise provided elsewhere in the contract, if any dispute, difference, question or disagreement arises between the parties hereto or their respective representatives or assignees, at any time in connection with construction, meaning, operation, effect, interpretation or out of the contract or breach thereof, the same shall be decided by Sole Arbitrator to be appointed by the Managing Director of ELCOT.

If the Arbitrator so appointed dies, resigns, incapacitated or withdraws for any reason from the proceedings, another Arbitrator shall be appointed by the Managing Director of ELCOT. The Arbitrator so appointed shall proceed with the reference from the stage, where his predecessor had left if both parties consent for the same, otherwise, he shall proceed de novo.

It is a term of the contract that the party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration and not thereafter.

It is also a term of the contract that neither party to the contract shall be entitled to seek interest and the arbitrator shall not grant interest.

The Arbitral Tribunal shall give reasoned award and the same shall be final, conclusive and binding on the parties.

The venue of the arbitration shall be Chennai and language English.

The fees of the Arbitrator and expenses incidental to the arbitration proceedings shall be borne equally by the parties.

Subject to as aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment in lieu thereof shall apply to the arbitration proceedings under this Clause.

Subject to the above, the Courts at Chennai alone shall have jurisdiction in the matter.

In Witness whereof the parties hereto have signed on the day, month and year above written in the presence of

For and or behalf of

For and on behalf of

Electronics Corporation of
Tamil Nadu Limited

Witnesses:

- 1.
- 2.

Successful Bidder

Witnesses:

- 1.
- 2.

Appendix-2 Bank Guarantee Format

(To be executed in Rs.100/- Stamp Paper)

To
The Managing Director
Electronics Corporation of Tamil Nadu Limited
MHU Complex II Floor
692 Anna Salai, Nandanam
Chennai - 600035

Bank Guarantee No:
Amount of Guarantee:
Guarantee covers from:
Last date for lodgement of claim:

This Deed of Guarantee executed by (Banker's Name & Address) having our Head Office at(address) (hereinafter referred to as "the Bank") in favour of The Managing Director, Electronics Corporation of Tamil Nadu Limited, MHU Complex II Floor, 692 Anna Salai, Nandanam, Chennai - 600035 (hereinafter referred to as "the Beneficiary") for an amount not exceeding Rs._____/-(Rupees _____ Only) as per the request of M/s. _____ having its office address at _____ (hereinafter referred to as "Supplier") against Letter of Acceptance reference _____ dated __/__/__ of M/s. Electronics Corporation of Tamil Nadu Limited. This guarantee is issued subject to the condition that the liability of the Bank under this guarantee is limited to a maximum Rs._____/-(Rupees _____ Only) and the guarantee shall remain in full force up to ____ months from the date of Bank Guarantee and cannot be invoked otherwise by a written demand or claim by the beneficiary under the Guarantee served on the Bank before ____ months from the date of Bank Guarantee.

AND WHEREAS it has been stipulated by you in the said ORDER that the Supplier shall furnish you with a Bank Guarantee by a Scheduled/Nationalised Bank for the sum specified therein as security for compliance with the Contractor's performance obligations for a period in accordance with the contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee.

THEREFORE, we (Bankers address)....., hereby affirm that we are Guarantors and responsible to you on behalf of the Supplier up to a total of Rs._____/-(Rupees _____ Only) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the contract and without any demur, cavil or argument, any sum or sums within the limit of Rs._____/-(Rupees _____ Only) as aforesaid, without your needing to prove or show grounds or reasons for your demand or the sum specified therein. We will pay the

guaranteed amount notwithstanding any objection or dispute whatsoever raised by the Supplier.

This Guarantee is valid until _____ months from the date of Bank Guarantee.

Notwithstanding, anything contained herein

Our liability under this guarantee shall not be exceed Rs. _____/- (Rupees _____ Only). This bank guarantee shall be valid up to ___ months from the date of Bank Guarantee and we are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____

In witness whereof the Bank, through its authorised Officer, has set its, hand and stamp on this at _____.

Witness:

(Signature)

(Name in Block Letters)

Appendix-3 Sample Submission Form

Date of submission: __/__/__

Vendor Name :

Vendor Address :

Tender No. :

Sample Submitted On :

Tender Product Sl No. :

Sl.No.	Item No.in the Tender	Item Description	Make	Model	Sl.No of the Item

VENDOR

Bidding Company Name:

Signature of the Representative:

Name:

Designation:

Contact No.

ELCOT

*Name & Designation of the Person Receives
the Sample:*

Store I/C Name & Designation:

Signature:

Appendix – 4 Manufacturer's Letter of Guarantee
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To
The Managing Director,
Electronics Corporation of Tamil Nadu Ltd.,
MHU Complex, II Floor,
692, Anna Salai,
Nandanam, Chennai – 600 035.

Sir,

We hereby authorise M/sto undertake to submit a Bid, and subsequently negotiate and sign the contract with the purchaser against Tender No: ELCOT/Proc/OT/32821/UPS Systems/2015-16 for the (type the Description of goods) developed by us. We hereby extend our full warranty for the goods offered for supply by the above firm against this tender.

We also undertake to provide timely supplies as per terms of tender and as agreed mutually and also to provide a trouble free and continuous support either directly or through our authorised partners under our supervision during the Warranty and Extended Warranty Period. We will provide the necessary spares support in the event of replacement of any spare parts is necessitated while providing Warranty and Extended Warranty Services and if the spares are not available then we will arrange for complete replacement of the item(s) with an equivalent / higher model.

For this tender we authorise M/s. _____ (Complete address and full contact details of the partner) to be our sales and service partner. In the event of discontinuation of supply and service by our partner viz., M/s. _____ or any problem arises during provision of supply and services, the entire responsibility to provide trouble free and continuous supply and services to the enduser / purchaser rests with us and we undertake to provide supply and services directly or through our alternative sales / service partners.

In case of violation of any of the conditions above, I/We understand that I/ We are liable to be blacklisted by ELCOT for a period of three years.

(Signature for and on behalf of Principal)

Note: (1) Competent authority of the Manufacturer / Principal should issue the letter of authority.

(2) If the Bidder submits the Manufacturer's Letter of Guarantee other than the specimen provided above will not be considered as valid and hence will lead to rejection of the Bid itself.

Appendix-5 Letter of Guarantee for Maintaining Minimum Stock

To
The Managing Director,
Electronics Corporation of Tamil Nadu Ltd.,
MHU Complex, II Floor,
692, Anna Salai, Nandanam, Chennai – 600 035.
Sir,

We, M/s hereby undertake and ensure that as per the Tender clause **9.9 Minimum Stock Maintenance and 9.10C Warranty Clause** for the tender reference **ELCOT/Proc/OT/32821/UPS Systems/2015-16** floated by ELCOT for the supply of UPS Systems and related items, will maintain the minimum stock for the tendered items and strictly follow the instructions of ELCOT for the immediate delivery of the UPS Systems as per the conditions stipulated in the Tender.

1 . Minimum ex-stock of about 10 units of all items will be kept in the premises as confirmed by ELCOT. Upon issuance of notice from ELCOT, we will deliver and install the items within 24 hours for the Chennai customers and 48 hours for the customers outside Chennai.

2 . No financial commitment will be claimed by us for maintaining the ex-stock items.

3 . We ensure that at any point of time the minimum ex-stock level will be maintained. The shortfall of 10 number will be replenished within 7 days from the date of delivery of the items from the minimum stock.

4. ELCOT can inspect the Minimum stock level at any point of time and may impose a penalty of 20% of the cost of the equipments which are shortage of the specified qty.

2.If we fail to maintain the minimum stock level in three instances during the Rate Contract period, ELCOT reserves the right to terminate the RC contract with us and we may be declared as non performer which may not permit us in participating tenders floated by ELCOT in future, for the next three years.

In case of violation of any of the conditions above, I/We understand that I/We are liable to be blacklisted by ELCOT for a period of three years.

(Signature for and on behalf of Principal)

Appendix-6 Format for Clarifications / Amendments

FORMAT FOR
QUERIES ON TENDER CONDITIONS AND TECHNICAL SPECIFICATIONS

FOR COMMERCIAL CONDITIONS:

[illegible]

FOR TECHNICAL SPECIFICATIONS:

[illegible]

Appendix-7 Format for Bidder Compliance

COMPLIANCE STATEMENT FOR ITEM Code LIA600-30

Parameter	Details	Bidders Offer	Whether confirming to the tender specification Yes/ NO
Capacity	600VA LINE INTERACTIVE UPS with 0.6 PF		
Back-up Time	30 Minutes		
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)		
INPUT			
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE		
Frequency with Tolerance	50 Hz, +/- 3 Hz		
Battery (Secondary Source)	Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time at 360W Resistive Load. Minimum 390 VAH rating of battery should be given and also Sealed Maintenance Free (SMF) type – AH and no. of Batteries shall be suitably selected for required backup time at 360W Resistive Load.		
Battery Storage Box	Batteries should be provided inside the UPS Systems.		
OUTPUT			
Nominal Voltage	Output Nominal Volage – 220V / 230V AC, Output Voltage Regulation (+/- 1%)		
Frequency	50 Hz, +/- (0.2) HZ		
Waveform	Quasi/Pure Sine wave (Square wave not accepted)		
Transfer time	Transfer Time less than 6 msec, typical		
Load power factor	0.6 lag to unity		
OTHER /			
<u>GENERAL DATA</u>			

Automatic Voltage Regulators	To be provided		
Ambient Temperature range	To be specified by the tenderer		
Protections	Fuses for Input, Over load, over, under Voltage, short circuit, battery reverse, Lightening Protection		
Indications	Mains ON, Inverter ON, Battery Low, Overload.		
Alarms (Audio)	To be provided for low voltage condition for battery.		
Auto cut OFF	The UPS systems output should be cut off during no load conditions (Preferable)		
Power sockets	3 Nos. (5 Amps. capacity)		
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers		
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.		
Inverter Efficiency	Minimum 75%		
Total Harmonic Distortion	Maximum 40%		
Overload capacity	Overload Capacity withstand for 5 minutes at 110% load (660 Watts for Resistive Load /400Watts for Combinational Load).		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)		
ISO	ISO Certification Mandatory for the Manufacturing Process		

COMPLIANCE STATEMENT FOR ITEM Code LIA1000-30, LIA1000-60, LIA1000-120 AND LIA1000-240

Parameter	Details	Bidders Offer	Whether confirming to the tender specification Yes/ NO
Capacity	1KVA LINE INTERACTIVE UPS		
Back-up Time	For code LIA1000-30 – 30 minutes For code LIA1000-60 – 60 minutes For code LIA1000-120–120 minutes For code LIA1000-240 –240 minutes		
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)		
INPUT			
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE		
Frequency with Tolerance	50 Hz, +/- 3 Hz		
Battery (Secondary Source)	Sealed maintenance free(SMF) type – AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 60% Resistive Load. Minimum VAH rating of battery bank should be as given below:- 30 Minutes – 750 VAH 60 Minutes – 1500 VAH 120 Minutes – 3000 VAH 240 Minutes – 6000 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.		
Battery Storage Box	Internal or External Storage Box / MS-Rack for housing the Batteries.		
OUTPUT			
Nominal Voltage	Output Nominal Voltage – 220V / 230V AC, Output Voltage Regulation (+/-1%)		
Frequency	50 Hz, +/- (0.2) Hz		
Waveform	Quasi/Pure Sine wave (Square wave not accepted)		
Transfer time	4 - 6 msec. typical		
Load power factor	0.6 lag to unity		

Parameter	Details	Bidders Offer	Whether confirming to the tender specification Yes/ NO
<u>OTHER / GENERAL DATA</u>			
Automatic Voltage Regulators	To be provided		
Ambient Temperature range	To be specified by the tenderer		
Protections	Fuses for Input, Over load, over, under Voltage, short circuit, battery reverse, Lightning Protection		
Indications	Mains ON, Inverter ON, Battery Low, Overload.		
Alarms (Audio)	To be provided for low voltage condition for battery.		
Auto cut OFF	The UPS systems output should be cut off during no load conditions (Preferable)		
Power sockets	3 Nos. (5 Amps. capacity)		
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers		
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.		
Inverter Efficiency	Minimum 75%		
Total Harmonic Distortion	Maximum 40%		
Overload Capacity	Overload Capacity withstand for 5 minutes at 110% load (1100 Watts Resistive Load / 660 Watts Combinational Load).		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)		
ISO	ISO Certification Mandatory for the Manufacturing Process		

COMPLIANCE STATEMENT FOR ITEM Code OL1000-30, OL1000-60, OL1000-120 AND OL1000-240

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Capacity	1 KVA TRUE ONLINE UPS		
Back-up Time	For code OL1000-30 – 30 minutes For code OL1000-60 – 60 minutes For code OL1000-120 – 120 minutes For code OL1000-240 – 240 minutes		
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)		
INPUT			
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE		
Input power factor	> 0.9		
Frequency with Tolerance	50 Hz, +/- 3 Hz		
Battery (Secondary Source)	Sealed maintenance free (SMF) type AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Minimum VAH rating of battery bank should be as given below:- 30 Minutes – 790 VAH 60 Minutes – 1580 VAH 120 Minutes – 3160 VAH 240 Minutes – 6320 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.		
DC Bus voltage	To be specified by the tenderer		
Make of the Battery	Specify the Manufacturer Make, Model and enclose the technical sheet. The make and AH of the battery submitted for evaluation only will be accepted		
Battery Storage Box	External Storage Box / MS-Rack for housing the Batteries.		
OUTPUT			
Nominal Voltage	230 AC, Single Phase (+/-1%)		
Voltage Regulation	± 1%		
Frequency	50 Hz, +/- (0.2) Hz		

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Waveform	Pure Sine wave		
Load power factor	0.7 lag to unity		
<u>OTHER GENERAL DATA</u>			
Overload Capacity	Overload Capacity – Withstand for 5 minutes at 110% load (1100 Watts Resistive Load / 770 Watts Combinational Load)		
Total Harmonic Distortion	< 4% for Linear load and 5% for non linear load		
Efficiency	> 80%		
Ambient Temperature	To be specified by the tenderer (Preferable upto 50 Degree Celsius)		
Duty Cycle	Continuous		
Cooling	Forced air cooling		
Protections	1) Input, Output – Low and High 2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse 5) Short circuit 6) Over load 7) Lightening		
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications		
Power sockets	Power Sockets – 3 Nos. 5A / 15A capacity sockets with at least one 15A Socket.		
Trip Conditions	Over load, Over, Under voltage, Short Circuit Indications Mains ON, Inverter ON, Battery Low, Overload.		
Alarms (Audio)	For extreme battery low voltage.		
Meters	Meters – AC Volt Meter for input and output. DC Volt Meter, Frequency Meter for output in Analog / Digital Mode.		
Manuals	Operating and User manual to be Provided		
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers		
Isolation	Isolation Transformer must be provided		

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Transformer	internally / externally at input.		
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)		
ISO	ISO Certification Mandatory for the Manufacturing Process		
SNMP card	Provisions should be available		

COMPLIANCE STATEMENT FOR ITEM Code OL2000-30, OL2000-60, OL2000-120 AND OL2000-240

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Capacity	2 KVA TRUE ONLINE UPS		
Back-up Time	For code OL2000-30 – 30 minutes For code OL2000-60 – 60 minutes For code OL2000-120 – 120 minutes For code OL2000-240 – 240 minutes		
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)		
INPUT			
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE		
Input power factor	> 0.9		
Frequency with Tolerance	50 Hz, +/- 3 Hz		
Battery (Secondary Source)	Sealed maintenance free(SMF) type – AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Minimum VAH rating of battery bank should be as given below:-		

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
	30 Minutes – 1580 VAH 60 Minutes – 3160 VAH 120 Minutes – 6320 VAH 240 Minutes – 11640 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.		
DC Bus voltage	To be specified by the tenderer		
Make of the Battery	Specify the Manufacturer Make, Model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted.		
Battery Storage Box	External Storage Box / MS-Rack for housing the Batteries.		
OUTPUT			
Nominal Voltage	230V AC, Single Phase (+/-1%)		
Voltage Regulation	$\pm 1\%$		
Frequency	50 Hz, +/- (0.2) Hz		
Waveform	Pure Sine wave		
Load power factor	0.7 lag to unity		
<u>OTHER / GENERAL DATA</u>			
Overload Capacity	Overload Capacity: Withstand for 5 Minutes at 110% load (2200 Watts Resistive Load / 1540Watts Combinational Load).		
Total Harmonic Distortion	< 4% for Linear load and 5% for non linear load		
Efficiency	> 80%		
Ambient Temperature	To be specified by the tenderer (Preferable upto 50 Degree Celsius)		
Duty Cycle	Continuous		
Cooling	Forced air cooling		
Protections	1) Input, Output – Low and High 2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse		

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
	5) Short circuit 6) Over load 7) Lightening		
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications		
Power sockets	Power Sockets – 3 Nos. 5A / 15A capacity Sockets with at least one 15A Socket.		
Trip Conditions	Over load, Over, Under voltage, Short Circuit Indications Mains ON, Inverter ON, Battery Low, Overload.		
Alarms (Audio)	For extreme battery low voltage.		
Meters	Meters – AC Volt Meter for input and output. DC Volt Meter, Frequency Meter for output in Analog / Digital Mode.		
Manuals	Operating and User manual to be Provided		
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers		
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.		
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)		
ISO	ISO Certification Mandatory for the Manufacturing Process		
SNMP card	Provisions should be available		

COMPLIANCE STATEMENT FOR ITEM Code OL3000-30, OL3000-60, OL3000-120 AND OL3000-240

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Capacity	3 KVA TRUE ONLINE UPS		
Back-up Time	For code OL3000-30 – 30 minutes For code OL3000-60 – 60 minutes For code OL3000-120 – 120 minutes For code OL3000-240 – 240 minutes		
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)		
INPUT			
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE		
Input power factor	> 0.9		
Frequency with Tolerance	50 Hz, +/- 3 Hz		
Battery (Secondary Source)	Sealed maintenance free(SMF) type-AH and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Minimum VAH rating of battery bank should be as given below:- 30 Minutes – 2350 VAH 60 Minutes – 4700 VAH 120 Minutes – 9400 VAH 240 Minutes – 18800 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.		
DC Bus voltage	To be specified by the tenderer		
Make of the Battery	Specify the Manufacturer Make, Model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted.		
Battery Storage Box	External Storage Box / MS-Rack for housing the Batteries.		
OUTPUT			
Nominal Voltage	230V AC, Single Phase (+/-1%)		

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Voltage Regulation	$\pm 1\%$		
Frequency	50 Hz, +/- (0.2) Hz		
Waveform	Pure Sine wave		
Load power factor	0.7 lag to unity		
OTHER GENERAL DATA	/		
Overload Capacity	Overload Capacity – Withstand for 5 Minutes at 110% Load (3300 Watts Resistive Load / 2310 Watts Combinational Load).		
Total Harmonic Distortion	< 4% for Linear load and 5% for non linear load		
Efficiency	> 80%		
Ambient Temperature	To be specified by the tenderer (Preferable upto 50 Degree Celsius)		
Duty Cycle	Continuous		
Cooling	Forced air cooling		
Protections	1) Input, Output – Low and High 2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse 5) Short circuit 6) Over load 7) Lightening		
Mobility	All UPS system fitted with castors for Mobility		
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications		
Power sockets	2 Nos. (15 Amps. Capacity) sockets		
Trip Conditions	Over load, Over, Under voltage, Short Circuit Indications Mains ON, Inverter ON, Battery Low, Overload.		
Alarms (Audio)	For extreme battery low voltage.		
Meters	AC Volt Meter for input and out put, DC Volt Meter, Frequency Meter, AC load current for output in Analog / Digital mode		

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Manuals	Operating and User manual to be Provided		
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers		
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.		
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)		
ISO	ISO Certification Mandatory for the Manufacturing Process		
SNMP card	Provisions should be available		

COMPLIANCE STATEMENT FOR ITEM Code OL5000-30, OL5000-60, OL5000-120 AND OL5000-240

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Capacity	5 KVA TRUE ONLINE UPS		
Back-up Time	For code OL5000-30 – 30 minutes For code OL5000-60 – 60 minutes For code OL5000-120 – 120 minutes For code OL5000-240 – 240 minutes		
Inverter Type	IGBT (Make and current capacity to be specified by the tenderer)		
INPUT			
Mains Voltage Regulation	150 - 270V AC, SINGLE PHASE		
Input power factor	> 0.9		
Frequency with Tolerance	50 Hz, +/- 3 Hz		
Battery (Secondary)	Sealed maintenance free(SMF) type – AH		

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Source)	and no. of Batteries shall be suitably selected for the respective minimum backup time of 70% Resistive Load. Minimum VAH rating of battery bank should be as given below:- 30 Minutes – 3950 VAH 60 Minutes – 7900 VAH 120 Minutes – 15800 VAH 240 Minutes – 31600 VAH Sealed maintenance free (SMF) type – AH and No. of Batteries shall be suitable selected for required backup time.		
DC Bus voltage	To be specified by the tenderer		
Make of the Battery	Specify the Manufacturer Make, Model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted.		
Battery Storage Box	External Storage Box / MS-Rack for housing the Batteries.		
OUTPUT			
Nominal Voltage	230V AC, Single Phase (+/-1%)		
Voltage Regulation	Voltage Regulation: 230V +/-1%		
Frequency	50 Hz, +/- (0.2) Hz		
Waveform	Pure Sine wave		
Load power factor	0.7 lag to unity		
OTHER GENERAL DATA /			
Overload Capacity	Overload Capacity: Withstand for 5 Minutes at 110% load (5500 Watts Resistive Load / 3850 Watts for Combinational Load).		
Total Harmonic Distortion	< 4% for Linear load and 5% for non linear load		
Efficiency	> 85%		
Ambient Temperature	To be specified by the tenderer (Preferable upto 50 Degree Celsius)		
Duty Cycle	Continuous		
Cooling	Forced air cooling		

Parameter	Details	Bidders Offer	Whether confirming to the specification Yes/No
Protections	1) Input, Output – Low and High 2) Battery low and high voltage 3) Input, output – Fuse 4) Battery - MCB/Fuse 5) Short circuit 6) Over load 7) Lightening		
Controls	Manual By-pass Switch and static bypass switch to be provided with Indications		
Power sockets	1 No.32 Amps. Capacity Terminal Block		
Trip Conditions	Over load, Over, Under voltage, Short Circuit Indications Mains ON, Inverter ON, Battery Low, Overload.		
Alarms (Audio)	For extreme battery low voltage.		
Meters	Meters – AC Volt Meter for input and output. DC Volt Meter, Frequency Meter for output in Analog / Digital Mode.		
Manuals	Operating and User manual to be Provided		
Name Plate in the UPS	Name plate in UPS-Riveted metal plates / Stickers		
Isolation Transformer	Isolation Transformer must be provided internally / externally at input.		
Software	Software for automatic shutdown of the system compatible with Linux (mandatory) and windows.		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)		
ISO	ISO Certification Mandatory for the Manufacturing Process		
SNMP card	Provisions should be available		

Compliance Statement for Product Code No. 1121/1122/1123/1124 10 KVA Online UPS Systems – 30 / 60 / 120 / 240 Minutes Backup

Parameter	Tender Specification	Bidder's offer	Whether confirming to the tender specification Yes/ NO
Capacity /Technology	10KVA True On-Line UPS with DSP Based Inverter Monitoring and IGBT Charger		
Back-Up Time	1/2 Hour		
Type	IGBT (make and current capacity to be specified by the tenderer)		
<u>INPUT</u>			
Voltage Mains (Primary Source)	440V 3Ph -20%, +10%		
Input Power factor	> 0.9		
Frequency	50 Hz		
Battery (Secondary Source)			
	<u>Sealed maintenance free(SMF) type</u> 1.AH and no. of batteries shall be suitably selected for backup time of 30 mins.(minimum) at 10KW resistive Load / 7 KW Combinational load. 2.Minimum VAH rating of battery bank should be as given below: <div style="display: flex; justify-content: space-between;"> 30 mts 60 mts </div> <div style="display: flex; justify-content: space-between;"> 120 mts </div> <div style="display: flex; justify-content: space-between;"> 7950 15950 </div> <div style="display: flex; justify-content: space-between;"> 31950 </div>		
DC Bus Voltage	To be specified by the tenderer. Make and number of batteries, each battery capacity and voltage are to be specified.		
Make of the battery	Specify the manufacturer, model and enclose the technical specification sheet. The make and AH of the battery submit-		

	ted for evaluation only will be accepted		
Battery Storage Box/Rack	<u>Battery Storage Rack</u> External Battery Storage Rack for housing the batteries with safety provisions to be supplied along with the UPS system		
<u>OUTPUT</u>			
Nominal Voltage	230V - AC Single Phase		
Voltage Regulation	$\pm 1\%$		
Frequency	50 Hz		
load regulation	$\pm 2\%$		
Variation in Frequency	$\pm 0.2\text{HZ}$		
Load Power factor	0.7 lag to unity		
Waveform	Pure Sine Wave		
<u>Other/General Data</u>			
Overload Capabilities	120% load (12KW)for 5min.		
	110% load (11KW)for 10min		
Overall Efficiency	Greater than 85% at full load		
Total Harmonic Distortion	Less than 3% for 100% linear loads		
Ambient Temperature range	-10 to 50deg Cel		
Inverter efficiency	>90%		
Duty Cycle	Continuous		
Cooling	Forced air cooling		
Protections	1) Input, output - Low and High		
	2.) Battery low		
	3.) Input, output – Breaker		
	4.) Battery – Fuse		
	5.) Short circuit		
	6.) Over load		
	7) Temperature over load		
	8) Transient		
	9) surge		

Controls	In-Built Static bypass switch to be provided		
Trip Conditions	Over load, over/under voltage, low battery		
Indications and	Mains ON, Inverter ON, battery Low, Overload		
Alarms (Audio)	For extreme battery low voltage		
(both Remote & panel)			
Meters	Display showing AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,		
Input cable and output cable:	To be provided as per the standards		
Manuals	Operating and user manual to be provided		
Name Plate in the UPS	Riveted/ Printed Name and Sr.No.		
<u>Communication and Management</u>			
Interface ports	DB-9 RS-232, Smart-Slot , USB		
Input cable and output cable	Proper rated input cable – 3mtrs x 5 runs and output cable – 3 mtrs. x 3 runs with PVC pipe to be provided		
Emergency Switch OFF	To be Provided		
Isolation Transformer	Isolation transformer must be provided Internal/ External		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years) ISO Certification Mandatory for the Manufacture Process and ISO 14001:2004 certified for handling hazardous products.		

Software	Software for automatic shut down of the system compatible with Windows and Linux. Technical details of the software to be enclosed (Preferable)		
SNMP card	Provisions should be available		
Wiring Items for 10 KVA Online UPS Systems			
1151a	Input Isolator with MS Enclosure – 32A – 4 Pole		
1152b	Input Wiring: Cable: 6.0 Sq.mm – 5 Run		
1153c	Output MCB with Enclosure - 50A - Double Pole		
1154d	Output Wiring Cable Details 10.0Sq.mm - 2 Run & 6.0 sq.mm 1Run		
1155	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box		
1156	5A-3pin Switches & Sockets 1 set with Gang box		
1157	15A Plug & Socket with box		
1158	Earthing: Earthing for 10 kva - Providing separate Isolated Earth pit. Earth pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)		
1159	Earthing wiring with 6 sq.mm cable 10 kva ups		

Compliance Statement for Product Code No. 1125/1126/1127/1128 - 15 KVA Online UPS Systems – 30 / 60 / 120 / 240 Minutes Backup.

Parameter	Tender Specification	Bidder's offer	Whether confirming to the tender specification Yes/ NO
Capacity /Technology	15KVA True On-Line UPS with DSP Based Inverter Monitoring and IGBT Charger		
Back-Up Time	1/2 Hour		
Type	IGBT (make and current capacity to be specified by the tenderer)		
<u>INPUT</u>			
Voltage Mains(Primary Source)	440V 3Ph -20%, +10%		
Input Power factor	> 0.9		
Frequency	50 Hz		
Battery (Secondary Source)			
	<u>Sealed maintenance free(SMF) type</u> 1.AH and no. of batteries shall be suitably selected for backup time of 30 mins.(minimum) at 15KW resistive Load / 10.5KVA Combinational load. 2.Minimum VAH rating of battery bank should be as given below: 30 mts 60 mts 120 mts 11950 23950 47950		
DC Bus Voltage	To be specified by the tenderer. Make and number of batteries, each battery capacity and voltage are to be specified.		
Make of the battery	Specify the manufacturer, model and enclose the		

	technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted		
Battery Storage Box/Rack	Battery Storage Rack External Battery Storage Rack for housing the batteries with safety provisions to be supplied along with the UPS system		
<u>OUTPUT</u>			
Nominal Voltage	230V - AC Single Phase		
Voltage Regulation	$\pm 1\%$		
Frequency	50 Hz		
load regulation	$\pm 2\%$		
Variation in Frequency	$\pm 0.2\text{HZ}$		
Load Power factor	0.7 lag to unity		
Waveform	Pure Sine Wave		
<u>Other/General Data</u>			
Overload Capabilities	120% load (18KW)for 5min.		
	110% load (16.5KW)for 10min		
Overall Efficiency	Greater than 85% at full load		
Total Harmonic Distortion	Less than 3% for 100% linear loads		
Ambient Temperature range	-10 to 45 deg Cel		
Inverter efficiency	>90%		
Duty Cycle	Continuous		
Cooling	Forced air cooling		
Protections	1) Input, output - Low and High		
	2.) Battery low		
	3.) Input, output – Breaker		

	4.) Battery – Fuse		
	5.) Short circuit		
	6.) Over load		
	7) Temperature over load		
	8) Transient		
	9) surge		
Controls	In-Built Static bypass switch to be provided		
Trip Conditions	Over load, over/under voltage, low battery		
Indications and	Mains ON, Inverter ON, battery Low, Overload		
Alarms (Audio)	For extreme battery low voltage		
(both Remote & panel)			
Meters	Display showing AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,		
Input cable and output cable:	To be provided as per the standards		
Manuals	Operating and user manual to be provided		
Name Plate in the UPS	Riveted/ Printed Name and Sr.No.		
<u>Communication and Management</u>			
Interface ports	DB-9 RS-232, Smart-Slot , USB		
Input cable and output cable	Proper rated input cable – 3mtrs x 5 runs and output cable – 3 mtrs. x 3 runs with PVC pipe to be provided		

Emergency Switch OFF	To be Provided		
Isolation Transformer	Isolation transformer must be provided Internal/ External		
Certification	SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years) ISO Certification Mandatory for the Manufacture Process and ISO 14001:2004 certified for handling hazardous products.		
Software	Software for automatic shut down of the system compatible with Windows and Linux. Technical details of the software to Be enclosed (Preferable)		
SNMP card	Provisions should be available		
Wiring Items for 15 KVA Online UPS Systems			
1160a	Input Isolator with MS Enclosure – 40A – 4 Pole		
1160b	Input Wiring: Cable: 10.0 Sq.mm – 5 Run		
1160c	Output MCB with Enclosure - 63A / 80A - Double Pole		
116027d	Output Wiring Cable Details 25.0Sq.mm - 2 Run & 10.0 sq.mm 1Run		
1161	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box		
1162	5A-3pin Switches & Sockets 1 set with Gang box		

1163	15A Plug & Socket with box		
1164	Earthing: Earthing for 15 kva - Providing separate Isolated Earth pit. Earth pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)		
1165	Earthing wiring with 10 sq.mm cable 10 kva ups		

Compliance Statement for Product Code No. 1129/1130/1131/1132 - 20 KVA Online UPS Systems – 30/60/120/240 Minutes Backup.

Parameter	Tender Specification	Bidder's offer	Whether confirming to the tender specification Yes/ NO
Capacity /Technology	20KVA True On-Line UPS with DSP Based Inverter Monitoring and IGBT Charger		
Back-Up Time	1/2 Hour		
Type	IGBT (make and current capacity to be specified by the tenderer)		
<u>INPUT</u>			
Voltage Mains(Primary Source)	440V 3Ph -20%, +10%		
Input Power factor	> 0.9		

Frequency	50 Hz		
Battery (Secondary Source)			
	<u>Sealed maintenance free(SMF) type</u> 1.AH and no. of batteries shall be suitably selected for backup time of 30 mins.(minimum) at 20KW resistive Load / 14 KVA Combination-al load. 2.Minimum VAH rating of battery bank should be as given below: 30mts 60 mts 120 mts 15950 31950 63950		
DC Bus Voltage	To be specified by the tenderer. Make and number of batteries, each battery capacity and voltage are to be specified.		
Make of the battery	Specify the manufacturer, model and enclose the technical specification sheet. The make and AH of the battery submitted for evaluation only will be accepted		
Battery Storage Box/Rack	<u>Battery Storage Rack</u> External Battery Storage Rack for housing the batteries with safety provisions to be supplied along with the UPS system		
<u>OUTPUT</u>			
Nominal Voltage	230V - AC Single Phase		
Voltage Regulation	$\pm 1\%$		
Frequency	50 Hz		
load regulation	$\pm 2\%$		
Variation in Frequency	$\pm 0.2\text{HZ}$		
Load Power factor	0.7 lag to unity		
Waveform	Pure Sine Wave		
<u>Other/General Data</u>			

Overload Capabilities	120% load (24 KW)for 5min.		
	110% load (22 KW)for 10min		
Overall Efficiency	Greater than 85% at full load		
Total Harmonic Distortion	Less than 3% for 100% linear loads		
Ambient Temperature range	-10 to 45 deg Cel		
Inverter efficiency	>90%		
Duty Cycle	Continuous		
Cooling	Forced air cooling		
Protections	1) Input, output - Low and High		
	2.) Battery low		
	3.) Input, output – Breaker		
	4.) Battery – Fuse		
	5.) Short circuit		
	6.) Over load		
	7) Temperature over load		
	8) Transient		
	9) surge		
Controls	In-Built Static bypass switch to be provided		
Trip Conditions	Over load, over/under voltage, low battery		
Indications and	Mains ON, Inverter ON, battery Low, Overload		
Alarms (Audio)	For extreme battery low voltage		
(both Remote & panel)			
Meters	Display showing AC O/P Voltage, O/P current, I/P Voltage, I/P Current, Battery Voltage, Battery Current,		
Input cable and output cable:	To be provided as per the standards		
Manuals	Operating and user manual to		

	be provided		
Name Plate in the UPS	Riveted/ Printed Name and Sr.No.		
<u>Communication and Management</u>			
Interface ports	DB-9 RS-232, Smart-Slot , USB		
Input cable and output cable	Proper rated input cable – 3mtrs x 5 runs and output cable – 3 mtrs. x 3 runs with PVC pipe to be provided		
Emergency Switch OFF	To be Provided		
Isolation Transformer	Isolation transformer must be provided Internal/ External		
Certification	<p>SAMEER / ETDC / ERTL / NABL's or any other Government authorised Testing Lab Certification for any back up of each UPS Category Mandatory for this specification (issued within last 6 years)</p> <p>ISO Certification Mandatory for the Manufacture Process and ISO 14001:2004 certified for handling hazardous products.</p>		
Software	Software for automatic shut down of the system compatible with Windows and Linux. Technical details of the software to Be enclosed (Preferable)		
SNMP card	Provisions should be available		
Wiring Items for 20 KVA Online UPS Systems			
1166a	Input Isolator with MS Enclosure – 63A – 4 Pole		
1166b	Input Wiring: Cable: 16.0 Sq.mm – 5 Run		
1166c	Output MCB with Enclosure - 100A - Double Pole		
1166d	Output Wiring Cable Details		

	25.0Sq.mm - 2 Run & 10.0 sq.mm 1Run		
1167	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box		
1168	5A-3pin Switches & Sockets 1 set with Gang box		
1169	15A Plug & Socket with box		
1170	Earthing: Earthing for 20 kva - Providing separate Isolated Earth pit. Earth pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)		
1171	Earthing wiring with 16 sq.mm cable 20 kva ups		

For each item quoted in the Tender, the samples should be submitted indicating the make, model number and brouchers / specification of the items for benchmark testing by ELCOT as per Appendix-3 of the Tender. Already approved Make and Model need not be submitted for fresh evaluation.

The bidders have to submit all the samples **before the tender opening date, during the office hours, as per the date indicated in the tender document / corrigendum.**

Annexure-1 Technical Bid

A1.1 Check-list for Enclosures

Documents to be submitted		Fill (YES or NO)
Filled Tender Technical Bid Form and Price Bid Form		
Payment of Portal Charges and EMD amount		
Two Part Bid submission		
Letter of Authorisation for signing the Tender document		
Eligibility Criteria		
1.	Manufacturing License for UPS Systems should be submitted	
	Manufacturing capacity of UPS Systems should be submitted	
2.	Certificate of Incorporation	
3.	Copies of Balance Sheet and Profit & Loss Account for the last 3 Audited Financial years as a proof for turnover	
4.	Full copies of Work Order or signed Agreement and performance / order completion certificate from the customers for executing single order value.	
5.	<u>Service Centre Facilities</u> In case of Manufacturer's service centre or franchise service centre, copies of the land-line telephone bills or rent agreement dated before 30.09.2013 should be submitted as a proof for availability of the service centres	
	● Manufacturer should submit undertaking to do servicing directly or through their authorised service partners under their supervision. ● The bidders should obtain Performance Certificate from the customer and submit along with tender document as a proof for service capabilities.	
6.	The Bidder should have ISO 9001:2008 certified manufacturing facility and ISO 14001:2004 certified for handling hazardous products.	
7.	Power of Attorney for submitting the bid	
8.	Language of the supporting documents only in English	

A1.2 Profile of the Bidder

1.	Name of the Company	Principal Bidder
2.	Year of incorporation	
3.	Nature of the Company (Registered Company or Partnership or Proprietary)	
4.	Registered office	
	Telegraphic Address	
	Office Telephone Number	

	Fax Number	
	Contact Person	
	Name	
	Personal Telephone Number	
	Email Address	
5.	Local presence at Tamil Nadu	
	Telegraphic Address	
	Office Telephone Number	
	Fax Number	
	Contact Person	
	Name	
	Personal Telephone Number	
	Email Address	
6.	Registration Details	
	Permanent Account Number	
	VAT Registration Number	
	CST Registration Number	
	Service Tax Registration Number	
7.	Banker's Name, Address and Account Number	
8.	ESI Registration No. and ESI Remittance details for last 3 years	
9.	PF Registration No. and PF Remittance details for last 3 years.	

A1.3 Details in support of Eligibility Criteria

Sl.No.	Description	Please give details along with proof
1.	Certificate of Incorporation	
2.	Manufacturing capacity	
3.	Annual Turn over (INR)	
	2013-14	
	2012-13	
	2011-12	
4.	Details of single Purchase order for hardware or peripherals executed in Government organisations	
5.	Details about service centres in Tamil Nadu	

A1.4 Details in support of Evaluation Criteria**1. List of Service Centres**

SN	District	Name of the Bidder, who established the centre and address of the centre	Details about the facilities and no. of service persons

2. Track record on timely completed supply orders

S	Name of customers	Purchase order reference, item, quantity and locations	Schedule date given by customer	Actual date of completion supported by performance certificate

3. Benchmark Test Results

The Bidders should enclose the test results of the Benchmark testing performed by the Bidder and test results for other items.

A1.5 Hardware Compliance

The Bidders should submit the details of the make and model of each item offered against the tender requirement and samples for the same need to be submitted for evaluation.

UPS Systems:-

SN	Item Code	Item Description	Item Quoted Details along with Make & Model
1	LIA 600-30	600 VA LIA UPS – 30 Minutes	
2	LIA 1000-30	1 KVA LIA UPS – 30 Minutes	
	LIA 1000-60	1 KVA LIA UPS – 60 Minutes	
	LIA 1000-120	1 KVA LIA UPS – 120 Minutes	
	LIA 1000-240	1 KVA LIA UPS – 240 Minutes	
3	OL-1000-30	1 KVA Online UPS – 30 Minutes	

	OL-1000-60	1 KVA Online UPS – 60 Minutes	
	OL-1000-120	1 KVA Online UPS – 120 Minutes	
	OL-1000-240	1 KVA Online UPS – 240 Minutes	
4	OL-2000-30	2 KVA Online UPS – 30 Minutes	
	OL-2000-60	2 KVA Online UPS – 60 Minutes	
	OL-2000-120	2 KVA Online UPS – 120 Minutes	
	OL-2000-240	2 KVA Online UPS – 240 Minutes	
5	OL-3000-30	3 KVA Online UPS – 30 Minutes	
	OL-3000-60	3 KVA Online UPS – 60 Minutes	
	OL-3000-120	3 KVA Online UPS – 120 Minutes	
	OL-3000-240	3 KVA Online UPS – 240 Minutes	
6	OL-5000-30	5 KVA Online UPS – 30 Minutes	
	OL-5000-60	5 KVA Online UPS – 60 Minutes	
	OL-5000-120	5 KVA Online UPS – 120 Minutes	
	OL-5000-240	5 KVA Online UPS – 240 Minutes	

SN	Item Code	ITEM DESCRIPTION	Item quoted details along with Make & Model
7	1121	10 KVA Online UPS Systems 30 Minutes Backup	
8	1122	10 KVA Online UPS Systems 60 Minutes Backup	
9	1123	10 KVA Online UPS Systems 120 Minutes Backup	
10	1124	10 KVA Online UPS Systems 240 Minutes Backup	
11	1125	15 KVA Online UPS Systems 30 Minutes Backup	
12	1126	15 KVA Online UPS Systems 60 Minutes Backup	
13	1127	15 KVA Online UPS Systems 120 Minutes Backup	
14	1128	15 KVA Online UPS Systems 240 Minutes Backup	
15	1129	20 KVA Online UPS Systems 30 Minutes Backup	
16	1130	20 KVA Online UPS Systems 60 Minutes Backup	
17	1131	20 KVA Online UPS Systems 120 Minutes Backup	
18	1132	20 KVA Online UPS Systems 240 Minutes Backup	

SN	Item Code	ITEM DESCRIPTION	Item quoted details along with Make & Model
Wiring Items for 10 KVA Online UPS Systems			
19	1151a	Input Isolator with MS Enclosure – 32A – 4 Pole	
20	1152b	Input Wiring: Cable: 6.0 Sq.mm – 5 Run	
21	1153c	Output MCB with Enclosure - 50A - Double Pole	
22	1154d	Output Wiring Cable Details 10.0Sq.mm - 2 Run & 6.0 sq.mm 1Run	
23	1155	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box	
24	1156	5A-3pin Switches & Sockets 1 set with Gang box	
25	1157	15A Plug & Socket with box	
26	1158	Earthing: Earthing for 10 kva - Providing separate Isolated Earth pit. Earth pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)	
27	1159	Earthing wiring with 6 sq.mm cable 10 kva ups	
Wiring Items for 15 KVA Online UPS Systems			
28	1160a	Input Isolator with MS Enclosure – 40A – 4 Pole	
29	1160b	Input Wiring: Cable: 10.0 Sq.mm – 5 Run	
30	1160c	Output MCB with Enclosure - 63A / 80A - Double Pole	
31	116027d	Output Wiring Cable Details 25.0Sq.mm - 2 Run & 10.0 sq.mm 1Run	
32	1161	Switches & Sockets: 5A-3pin Switches & Sockets 1	

SN	Item Code	ITEM DESCRIPTION	Item quoted details along with Make & Model
		No with Gang box	
33	1162	5A-3pin Switches & Sockets 1 set with Gang box	
34	1163	15A Plug & Socket with box	
35	1164	Earthing: Earthing for 15 kva - Providing separate Isolated Earth pit. Earth pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)	
36	1165	Earthing wiring with 10 sq.mm cable 10 kva ups	
Wiring Items 20 KVA Online UPS Systems			
37	1166a	Input Isolator with MS Enclosure – 63A – 4 Pole	
38	1166b	Input Wiring: Cable: 16.0 Sq.mm – 5 Run	
39	1166c	Output MCB with Enclosure - 100A - Double Pole	
40	1166d	Output Wiring Cable Details 25.0Sq.mm - 2 Run & 10.0 sq.mm 1Run	
41	1167	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box	
42	1168	5A-3pin Switches & Sockets 1 set with Gang box	
43	1169	15A Plug & Socket with box	
44	1170	Earthing: Earthing for 20 kva - Providing separate Isolated Earth pit. Earth pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I.	

SN	Item Code	ITEM DESCRIPTION	Item quoted details along with Make & Model
		pipe should be provided with funnel and copper bar. (including Civil work)	
45	1171	Earthing wiring with 16 sq.mm cable 20 kva ups	
ADD ON ITEM			
46	1172	SNMP card	

A 1.7 Declaration

I/We agree that the offer shall remain open for acceptance for a minimum period as stipulated in the Tender from the date of opening of the tender and thereafter until it is withdrawn by us by notice in writing duly addressed to the authority of opening the tender and sent by registered post with acknowledgement due or otherwise delivered at the office of the authority. The EMD amount shall not bear any interest and shall be liable to be forfeited to ELCOT should I/We fail to abide by the stipulations to keep the offer open for a period mentioned above or fail to sign and complete the contract document as required by ELCOT and furnish the Security Deposit as specified in the terms and conditions of the contract. The EMD amount may be adjusted towards SD or refunded to me/us unless the same or any part thereof has been forfeited as aforesaid.

I/We agree to adhere with the schedule of implementation and deliver the items as specified in the tender.

I/We declare that the Price bid has been submitted without any conditions and strictly as per the Terms and Conditions of the tender document and I/We am/are aware that the Price bid is liable to be rejected if it contains any other conditions.

I/We declare that the information furnished in the tender is true to the best of my/our knowledge. If any false/fictitious information is found I/We agree to the rejection of the bids and consequence action.

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Annexure-2 - PRICE BID – UPS Systems

"RATE CONTRACT REF NO : ELCOT/32821/UPS Systems/2015-16

S.N	Product Code	Description	Initial approx Qty & the future on RC	Unit Price for FOR destination(Packing, Forwarding and Insurance) with out TAXES	Installation & Commissioning charges & other charges if any (in Rs) per unit	Excise Duty with CVD per unit (Rs.)	Customs Duty (Rs.)	Applicable Local Taxes / CST per unit in (Rs)	Service Tax value per unit for Column 6 (in Rs.)	Total Unit Price with all Taxes and duties (Rs.) (5+6+7+8+9+10)	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1) UPS Systems											
1	LIA600-30	600VA – LIA UPS – 30 Minutes Backup	1 No.								
2	LIA1000-30	1 KVA – LIA – 30 Minutes Backup	1 No.								
3	LIA1000-60	1 KVA – LIA – 60 Minutes Backup	1 No.								
4	LIA1000-120	1 KVA – LIA – 120 Minutes Backup	1 No.								

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5	LIA1000-240	1 KVA – LIA – 240 Minutes Backup	1 No.								
6	OL1000-30	1 KVA – Online – 30 Minutes Backup	1 No.								
7	OL1000-60	1 KVA – Online – 60 Minutes Backup	1 No.								
8	OL1000-120	1 KVA – Online – 120 Minutes Backup	1 No.								
9	OL1000-240	1 KVA – Online – 240 Minutes Backup									
10	OL2000-30	2 KVA – Online – 30 Minutes Backup									
11	OL2000-60	2 KVA – Online – 60 Minutes Backup									
12	OL2000-120	2 KVA – Online – 120 Minutes Backup									
13	OL2000-240	2 KVA – Online – 240 Minutes Backup									

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14	OL3000-30	3 KVA – Online – 30 Minutes Backup									
15	OL3000-60	3 KVA – Online – 60 Minutes Backup									
16	OL3000-120	3 KVA – Online – 120 Minutes Backup									
17	OL3000-240	3 KVA – Online – 240 Minutes Backup									
18	OL5000-30	5 KVA – Online – 30 Minutes Backup									
19	OL5000-60	5 KVA – Online – 60 Minutes Backup									
20	OL5000-120	5 KVA – Online – 120 Minutes Backup									
21	OL5000-240	5 KVA – Online – 240 Minutes Backup									
UPS Cabling with Accessories											
2.0 KVA UPS Systems											
22	1151a	Input Isolator with									

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		MS Enclosure 15-A - 2 pole									
23	1151b	Input Wiring: Cable: 2.5 Sq.mm - 2 Run & 1.5 Sq.mm 1Run									
24	1151c	Output MCB with Enclosure 10 A - Double Pole									
25	1151d	Output Wiring Cable Details 2.5Sq.mm - 3 Run									
3.0 KVA UPS											
26	1152a	Input Isolator with MS Enclosure 32-A - 2 pole									
27	1152b	Input Wiring: Cable: 4.0 Sq.mm - 2 Run & 2.5 Sq.mm 1Run									
28	1152c	Output MCB with Enclosure 15 A - Double Pole									
29	1152d	Output Wiring Cable Details 2.5Sq.mm - 3 Run									

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<u>5.0 KVA UPS</u>											
30	1153a	Input Isolator with MS Enclosure 40-A - 2 pole									
31	1153b	Input Wiring: Cable: 6.0 Sq.mm - 2 Run & 4.0 Sq.mm 1Run									
32	1153c	Output MCB with Enclosure 25 A - Double Pole									
33	1153d	Output Wiring Cable Details 4.0Sq.mm - 3 Run									
<u>Switches & Sockets</u>											
34	1156	5A-3pin Switches & Sockets 1 No with Gang box									
35	1157	5A-3pin Switches & Sockets 1 set (1 set = 3 Nos.) with Gang box									
36	1158	15A Plug & Socket with box									
<u>Earthing</u>											
37	1159	Earthing for 2.0									

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		kva & 3.0 kva									
38	1160	Earthing for 5.0 kva									
39	1161	Earthing Wiring with 4.0 sqmms									
40	1162	Earthing wiring with 6 sq.mm cable for 5.0 kva.									
10 KVA Online UPS											
41	1121	10 KVA Online UPS Systems 30 Minutes Backup									
42	1122	10 KVA Online UPS Systems 60 Minutes Backup									
43	1123	10 KVA Online UPS Systems 120 Minutes Backup									
44	1124	10 KVA Online 45UPS Systems 240 Minutes Backup									
15 KVA Online UPS											
45	1125	15 KVA Online									

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		UPS Systems 30 Minutes Backup									
46	1126	15 KVA Online UPS Systems 60 Minutes Backup									
47	1127	15 KVA Online UPS Systems 120 Minutes Backup									
48	1128	15 KVA Online UPS Systems 240 Minutes Backup									
20 KVA Online UPS											
49	1129	20 KVA Online UPS Systems 30 Minutes Backup									
50	1130	20 KVA Online UPS Systems 60 Minutes Backup									
51	1131	20 KVA Online UPS Systems 120 Minutes Backup									
52	1132	20 KVA Online									

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		UPS Systems 240 Minutes Backup									
Wiring Items for 10 KVA Online UPS Systems											
53	1151a	Input Isolator with MS Enclosure – 32A – 4 Pole									
54	1152b	Input Wiring: Cable: 6.0 Sq.mm – 5 Run									
55	1153c	Output MCB with Enclosure - 50A - Double Pole									
56	1154d	Output Wiring Cable Details 10.0Sq.mm - 2 Run & 6.0 sq.mm 1Run									
57	1155	Switches & Sockets: 5A- 3pin Switches & Sockets 1 No with Gang box									

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58	1156	5A-3pin Switches & Sockets 1 set with Gang box									
59	1157	15A Plug & Socket with box									
60	1158	Earthing: Earthing for 10 kva - Providing separate Isolated Earth pit. Earth pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among									

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		the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)									
61	1159	Earthing wiring with 6 sq.mm cable 10 kva ups									
Wiring Items for 15 KVA Online UPS Systems											
62	1160a	Input Isolator with MS Enclosure – 40A – 4 Pole									
63	1160b	Input Wiring: Cable: 10.0 Sq.mm – 5 Run									
64	1160c	Output MCB with Enclosure - 63A / 80A -									

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		Double Pole									
65	116027d	Output Wiring Cable Details 25.0Sq.mm - 2 Run & 10.0 sq.mm 1Run									
66	1161	Switches & Sockets: 5A- 3pin Switches & Sockets 1 No with Gang box									
67	1162	5A-3pin Switches & Sockets 1 set with Gang box									
68	1163	15A Plug & Socket with box									
69	1164	Earthing: Earthing for 15 kva - Providing separate Isolated Earth pit. Earth									

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		pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)									
70	1165	Earthing wiring with 10 sq.mm cable 10 kva ups									

Tender Ref.: ELCOT/32821/UPS Systems/2015-16

Wiring Items 20 KVA Online UPS Systems											
71	1166a	Input Isolator with MS Enclosure – 63A – 4 Pole									
72	1166b	Input Wiring: Cable: 16.0 Sq.mm – 5 Run									
73	1166c	Output MCB with Enclosure - 100A - Double Pole									
74	1166d	Output Wiring Cable Details 25.0Sq.mm - 2 Run & 10.0 sq.mm 1Run									
75	1167	Switches & Sockets: 5A-3pin Switches & Sockets 1 No with Gang box									
76	1168	5A-3pin									

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		Switches & Sockets 1 set with Gang box									
77	1169	15A Plug & Socket with box									
78	1170	Earthing: Earthing for 20 kva - Providing separate Isolated Earth pit. Earth pit - 2" x 10 feet deep digging and providing 38mm G.I. pipe to a depth of 2.8Mts from the ground level and running copper strip from ground level to termination end, and filling of Charcoal and salt all among the earth Electrode up to									

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		ground level. The top end of the G.I. pipe should be provided with funnel and copper bar. (including Civil work)									
79	1171	Earthing wiring with 16 sq.mm cable 20 kva ups									
80	1172	SNMP card									
Note: 1) The Bidder shall submit the offer by filling up all the columns against each item. Bidders should quote for all the items. Partial quote is not allowed. The Bidder has to clearly indicate whether their quoted items attract CST or VAT in the Remarks Column.											

Annexure-3 - COMPREHENSIVE WARRANTY COST FOR 4TH AND 5TH YEAR
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- Comprehensive warranty cost in percentage for the 4th year = % + % Sales / Service Tax
- Comprehensive warranty cost in percentage for the 5th year = % + % Sales / Service Tax

Note:

10.Comprehensive Warranty for 4th and 5th Year should be quoted without fail, failing which the Price Bid shall not be considered for further process.
Comprehensive warranty cost means cost toward all the spares, service charge and all Taxes, excluding consumable cost if any