



Life Insurance Corporation Of India

**LIFE INSURANCE CORPORATION OF INDIA
JEEVAN PRAKASH, SILCHAR DIVISIONAL OFFICE,
MEHERPUR SILCHAR -7880 15**

LIMITED TENDER

ISSUED TO

M/S _____

LAST DATE OF SUBMISSION OF TENDER:

15:00 HRS ON 27.10.2023

AT OS DEPTT, SILCHAR DO

**QUOTATION FOR SUPPLY, INSTALLATION, TESTING &
COMMISSIONING OF ONLINE UPS SYSTEM AT SILCHAR B.O-1 &
HAILAKANDI B.O UNDER DIVISIONAL
OFFICE, SILCHAR**

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Technical Specifications – On line Double Conversion UPS

Technology: Technology should be digitally controlled; IGBT based double conversion on line VFI according to IEC 62040 – 3 specification.

A	INPUT		Vendor to specify
1	Input voltage	3 KVA to 7.5KVA 175-300V, 1 phase	
2	Input frequency	50Hz +/-5%	
3	Input Power factor at nominal voltage and full load	>0.90 at 100% load condition >0.85 at 10% load condition	
4	Nominal Input current during Normal running condition i.e., at 230V input phase voltage and 400V line voltage, 0.8p.f. At 100% load condition.	5KVA – 24.15amp +/- 5% per phase.	
5	Power walk-in period	30 sec	
6	Input circuit	IGBT based PWM rectifier	
7	Total harmonic distortion (THD) at input side	<10% at 100% load.	
B	OUTPUT		
1	Rated voltage	230+/-1% V 1 phase	

B	OUTPUT		Vendor to specify
2	Rated current at rated 230V output voltage and 0.8p.f. at 100% rated output.	5 KVA – 17amp +/- 1%	
3	Rated frequency	50 Hz +/- 0.1%	
4	Max. rate of change of frequency	0.1 Hz per second	
5	Output waveform	Pure sine wave	
6	Output power factor	Better than 0.80 at 100% rated output	
7	Output power factor support capability	0.8 lag to unity	
8	Internal oscillator stability	+/- 0.1%	
9	THD at Output side a) Linear load b) Non-linear load (Crest factor of 3:1)	< 2% for a 100% linear load < 5% for a 100% non-linear load	

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10	Crest Factor	3:1	
11	Overload rating	5 & 7.5 KVA UPS 110% for 3 minute 125% for 30 second 150% for 1.5 second	
12	Overload trip	5 & 7.5 KVA UPS 125% for 30 second	
13	Inverter Efficiency	Min 90%	
14	Overall Efficiency	At 100% load – 90% At 50% load - 85%(min)	

B	OUTPUT		Vendor to specify
15	Current limit short	Set at 150% of the output power	
C	DC CHARACTERISTICS		Vendor to specify
1	Nominal DC bus voltage (Total)	a) 5.0KVA minimum 192V DC	
2	Battery isolation	Manual Setting for Enable / disable function in LCD Display	
3	End of discharge voltage	In Vdc	
4	Charge Voltage (Float, boost & tolerance band) for each capacity of UPS		
5	Voltage tolerance	+/- 1%	
6	DC ripple	< 1%	
7	Battery charging current limit (or range)	In Adc	
8	No. of 12V SMF battery with AH rating for each capacity of UPS	For 5 KVA	
9	VAH Rating	Minimum VAH rating 5 KVA – 8000VAH	
10	Make of Battery:- EXIDE, GLOBAL YUASA, PANASONIC, HBL NIFE, AMCO, AMARON – AMARARAJA, POWERON		

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D	CONTROLS	Vendor to specify
1	Charger input MCB	
2	Battery circuit breaker (UPS should still function even with disconnection of breaker).	
3	Inverter output – Electrical protected for Over load and shortcircuit	
4	Bypass line Setting & Control (Enable / Disable option)	
5	Alarm acknowledge / Reset button	
6	Inverter on / off control thr' LCD Function	
7	Control Power for PCBs should be derived from dual power supply i.e., from battery source or from inverter- specify details	
E	MEASURING INSTRUMENTS	Vendor to specify
1	LCD panel for Measuring Output voltages, Output level and Frequency, Battery Voltage and Charging/ Discharging level	
2	LCD panel should display status of the Battery capacity level in % and Battery Voltage	
F	PROTECTIONS	Vendor to specify
1	RC surge suppressor, EMI/RFI filters.	
2	Under voltage & Over voltage on input side	
3	Phase loss & short circuit on input side	
4	Negative sequence on input side	
5	Snubber circuit for device dv/ dt protection	
6	Charger input current limit	
7	Electronic Trip protection for Short circuit, Over load. Fuses for Inverter circuit.	
8	Battery current limit (Over & Under charging of batteries)	
9	DC over voltage	
10	Low battery	
11	Semiconductor fuses at inverter output	
12	Overload & Short Circuit Protection	
13	Over temperature for the inverter	
14	Control circuit protection	

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G	INDICATIONS (ALARMS)	Vendor to specify
1	Inverter Failure	
2	Overload (if load exceeds 100%)	
3	Overload shutdown	
4	Emergency shutdown	
5	Equipment over temperature	
6	DC over voltage	
7	Low battery	
8	Battery Enable / Disable details in display	
9	Battery on load	
10	Mains failure	
11	Load on bypass	

H	MISCELLANEOUS		Vendor to specify
1	Communication Interface	RS-232 Communication port with SNMP card along with necessary software.	
2	Isolation Transformer	Galvanically isolated, isolation transformer of suitable rating to be provided at input side of the UPS (inbuilt to the UPS in Single Cabinet).	
3	Static By-pass switch	Double ended static by-pass switch with transfer time of 5 ms or less in syn. mode	
4	Ventilation	Forced Air Cooling with Integral fans.	
5	Protection Level (With front door open)	IP20	
6	Noise Level	< 55 dB at 1.0 Mtr.	
7	Certification	ISO 9001:2015, ISO 45001, ISO 14001	
8	BIS Certificate	Document should be submitted.(Offered Model to be Highlighted). Make in India product required	

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APPENDIX TO CONDITION OF CONTRACT:

- a) **Earnest Money Deposit** **Rs. 3,000.00 (Rupees Three thousand only)**
- b) **Security Deposit** : **EMD of successful agency to be converted to Security Deposit & balance SD shall be deducted from the Bill amount.**
- c) **Defects Liability Period** : **24 (Twenty Four) months**
- d) **Liquidated Damages** : **@1.5% per month of delay to be computed on per day basis, not to exceed 10% of the tendered value of work.**
- e) **Time Period for Work** : **Maximum 30 Days from the date of Work Order.**

SPECIAL TERMS AND CONDITIONS

1. Rates quoted should be valid for minimum period of 90 days from the last date of submission of quotation.
2. Rates quoted should be inclusive of all taxes excluding GST.
3. Rates quoted are for destination basis and no extra charges shall be paid on this account.
4. The delivery of UPS should be made within 30 (Thirty days) days at our offices. In case the UPS is not delivered by this date, necessary **liquidated damages shall be imposed @1.5% per month of delay to be computed on per day basis, not to exceed 10% of the tendered value of work.**

5. SECURITY DEPOSIT:

An amount equal to 5% of the accepted tender amount shall be deducted from bills towards Security Deposit. The security deposit so deducted from the bill shall be refunded after successful completion of the **defects liability period of (02) two years.**

6. Earnest Money Deposit (EMD)

Sealed Tenders are to be accompanied by Earnest Money of **Rs.3, 000/- (Rupees Three Thousand only)** through DD in favour of **“LIFE INSURANCE CORPORATION OF INDIA” payable at SILCHAR** or by cash to be deposited with our cash section during Cash hours and the M.R. is to be attached with the tender.

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7. TERMS OF PAYMENT:

First & final payment shall be made on SITC of UPS system at site & satisfactory testing of UPS in the presence of LIC representative.

8. TAXES, OCTROI & OTHER DUTIES:

The rates quoted shall be exclusive of GST. GST shall be as extra as applicable. The rate shall be quoted as FOR destination basis.

Deduction at source of Income Tax, TDS on works contract etc shall be made by LIC of India as per the provisions prevailing from time to time from the bills and remitted to the concerned Taxation Authorities /State Government on behalf of the contractor.

9. Water & Electricity Charges:

Recovery of water and electricity charges @0.5% of the gross value of work done from Contractor's bill if used from LIC source.

10. Testing of UPS System

The testing of each UPS shall be carried out through any one of the following agencies and test certificate with each UPS shall be attached. No extra charge will be paid on this account.

- a) National Test House
- b) ERTL
- c) ETDC
- d) Govt. Engg. College
- e) NIT
- f) IIT
- g) Regional Testing Centre
- h) CPRI
- I) SAMEER

The vendor is required to provide e-mail address of concerned lab where tests are carried out along with contact no. for necessary verification at our end.

All parameters specified in the tender shall be tested and confirmed.

11. TESTING OF EQUIPMENTS:

On placing the order with the lowest tenderer they shall arrange for Testing of all UPS SYSTEM OF EACH CAPACITY at the testing centre at agency's own cost and furnish the test certificate along with delivery of each UPS system. If the parameters of UPS system shall be delivered found to be sub-standard than specified UPS system, shall be returned till the corrective action is taken thereof at the agency's own cost. If the UPS is supplied without test Certificate, no payment will be made.

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12. It will be responsibility of the contractor to ensure that there should not be any damage to LIC properties & adjacent during the loading or unloading of UPS systems. The Contractor shall fully indemnify the Employer and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of all and any claim made in respect of any injury or damage under any acts of Government or otherwise and also in respect of any award or compensation or damages consequent upon such claim.

13. No advance for this contract will be paid. On successful installation, testing of UPS system in the presence of LIC Engineer/ representative first & final payment shall be released.

14. LIC reserves the full rights to reject one or all the quotations of issue part/ full quantity orders without assigning any reasons thereof.

15 The concerned technician assigned for respective B.O. should attend the defects of UPS within 24hrs. **If the defect is not attended and rectified within the above specified time then a penalty of Rs.200/- per day per UPS will be deducted from the bill of the agency. In case, considering quantum of defects, the UPS are required to be shifted to agency's workshop for repairing, one serviced UPS of adequate capacity has to be provided by the agency.** However in case the service UPS is provided as standby before the expiry of stipulated response time, no penalty will be charged.

16. LOCATION OF SUPPLY

UPS to be delivered at the following locations:

5KVA UPS

- a) LIC of India, Silchar B.O-1, Central Road, Silchar, Assam. 788 001
- b) LIC Of India, Hailakandi B.O, Old Hospital Road, Hailakandi-788 151

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BANK ACCOUNT AND OTHER DETAILS:

To be submitted along with Tender copy

Sl. No	Description	Details
01	Name of the Company/Firm/Entrepreneur Institute, etc	
02	Address	
	Phone Number	Mobile:
		Land Line:
	E-Mail ID	
03	Bank Account Details:	
A	Account No	
B	Type of Account	
C	IFSC/RTGS Code	
	(Enclose Xerox copy of the Cheque leaf)	
04	PAN No *	
05	TIN Registration No.*	
06	GST IN Registration No.*	

I declare that, the above furnished information is correct. During the contract period, if any changes took place in the above said information, the same will be informed with the valid reasons.

FOR ASSAM GSTIN NUMBER: 18AAACL0582H1ZL

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CONTRACTOR

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Schedule of Quantities

SI No	Description of Work	unit	Qty	Rate Quoted (Rs/-) in figure	Amount
1.	Supply, Installation, Testing & Commissioning of UPS system for 1 hour back up time as per Technical Specification of following capacities				
A	5 KVA (single phase input & single phase output) (without battery bank)	No.	2		
B	Buy Back rates of existing 5KVA UPS as is where basis condition.	No.	2		
	Net Amount after Buy Back 1(A) - 1(B)				

C E R T I F I E D

That the rates are quoted after gathering required information about the site and nature of work and acquainting with the working conditions.

That we have carefully studied the terms & conditions of the tender/contract and specifications for materials and workmanship and will adhere to the same throughout the contract period.

SIGNATURE OF THE CONTRACTOR
WITH OFFICE SEAL

PLACE:

DATE: