



Tender Ref. No. 01 Dated 07 April 2022

**FOR SUPPLY, INSTALLATION, TESTING &
COMMISSIONING OF 15 KVA ON-LINE UPS SYSTEM**

AT

**HEAD OFFICE OF THE COMMERCIAL CO-OPERATIVE
BANK LTD., KOLHAPUR**

615, E, Shahupuri 1st Lane, Kolhapur – 416001

Phone No :(0231) 2653261

Email ID: commercialbank@ccbl.co.in, agmit@ccbl.co.in

Website: <https://commercialcoopbank.com>

**TENDER NOTICE FOR SUPPLY, INSTALLATION,
TESTING AND COMMISSIONING OF
15 KVA ON-LINE UPS SYSTEM**

The Commercial Co-op Bank Ltd., Kolhapur invites sealed tenders/ Bids from reputed manufacturers, Sole Distributors, Authorized Franchises, Authorized vendors for purchase of 15 KVA ON-LINE UPS System, for use of its Head offices situated in Kolhapur. The Tender documents are also available on our Bank's website <https://commercialcoopbank.com>

The tender modalities are as under:

Tender Reference	No 01 Dated 07 April 2022
Tender Fees (Non-Refundable)	Rs. 1000/- . Transfer online to following account Account Details- Act No 116102000008655 IFSC Code IBKL0000116
Bid security	Rs. 10000/- By way of DD in favor of The Commercial Co-op. Bank Ltd Kolhapur . To be enclosed in Technical Bid
Tender Start Date	07 April 2022
Last date and time of receipts of tender/ bid	16 April 2022 up to 5.00. PM
Address of Communication	615, E, Shahupuri 1st Lane, Kolhapur – 416001 Email-commercialbank@ccbl.co.in , agmit@ccbl.co.in
Concern Person	Devdatta Bhosale
No. of UPS required	1

The specifications and Terms & Conditions are as under:

A) 15 KVA ON-LINE UPS SYSTEM

Parameters	Technical specification
Technology & Topology	IGBT Based PWM Inverter using Micro Controller
	Online Double conversion Type
Active Power Factor Correction	In built design
Input power factor	Better then 0.90
Input Frequency Range	50 Hz +/- 6 %
Output power factor	0.8 to 1 lag
Input (Voltage)	415 VAC +15 %, -20 %
Output (Voltage)	230 VAC +/- 1 %
Frequency	50 Hz +/- 0.5 %
Waveform (Output)	PWM Sine wave
Isolation Transformer	Inbuilt Galvanic Isolation Transformer
Transient Recovery	. + 4 % from 0 to Full load and corrected within 60 msec.
Harmonic Distortion	Less than 3 % on Linear Load
Minimum Metering/ Display Functions	Mimic Display, Mains on, Inverter On, Battery Low, Over Load, Output Under Voltage, Output Over Voltage, DC Over Voltage, I/p Single Phasing / Phase Reversal
Audible Alarm	Intermittent beep for 30 sec. On mains fail. Battery low pre-alarm at 80 % of Battery discharge. Intermittent Beep for all other Trip Conditions
Inverter efficiency	Greater than 90%
UPS type	ON-LINE
Maximum charging Current	Vendor to specify
Battery type	Lead-Acid Tubular/LFP Battery Pack
Overload capacity	110% for 60 min.
	125% for 10 min.
	150% for 1 min
Noise level	<60db at 1 Meter
Design ambient	0-50° C
Relative Humidity	Max. 95 % Non-Condensing
Enclosure	M.S. Powder coated with castor wheels
Protection	Output short circuit, Battery low trip, DC over voltage, Output under voltage / over voltage, Input under voltage / over voltage, I/p Single Phasing / Phase Reversal, Over Temperature
UPS Warranty Period	Minimum 3 years

B) 15 KVA ON-LINE UPS SYSTEM WITH ECO MODE

Parameters	Technical specification
Technology & Topology	IGBT Based PWM Inverter using Micro Controller
	Online Double conversion Type
Active Power Factor Correction	In built design
Input power factor	Better then 0.90
Input Frequency Range	50 Hz +/- 6 %
Output power factor	0.8 to 1 lag
Input (Voltage)	230 VAC +15 %, -20 %
Output (Voltage)	230 VAC +/- 1 %
Frequency	50 Hz +/- 0.5 %
Waveform (Output)	PWM Sine wave
Isolation Transformer	Inbuilt Galvanic Isolation Transformer
Transient Recovery	. ± 4 % from 0 to Full load and corrected within 60 msec.
Harmonic Distortion	Less than 3 % on Linear Load
Minimum Metering/ Display Functions	Mimic Display, Mains on, Inverter On, Battery Low, Over Load, Output Under Voltage, Output Over Voltage, DC Over Voltage, I/p Single Phasing / Phase Reversal
Audible Alarm	Intermittent beep for 30 sec. On mains fail. Battery low pre-alarm at 80 % of Battery discharge. Intermittent Beep for all other Trip Conditions
Inverter efficiency	Greater than 90%
Overall efficiency (ECO Mode)	Greater than 98%
UPS type	ON-LINE
Maximum charging Current	Vendor to specify
Battery type	Lead-Acid Tubular/LFP Battery Pack
Overload capacity	110% for 60 min.
	125% for 10 min.
	150% for 1 min
Noise level	<60db at 1 Meter
Design ambient	0-50° C
Relative Humidity	Max. 95 % Non-Condensing
Enclosure	M.S. Powder coated with castor wheels
Protection	Output short circuit, Battery low trip, DC over voltage, Output under voltage / over voltage, Input under voltage / over voltage, I/p Single Phasing / Phase Reversal, Over Temperature
UPS Warranty Period	Minimum 3 years

C) LITHIUM FERRO PHOSPHATE BATTERY PACK

Battery System Configuration	
Item	Technical specification
Cell Chemistry	LFP
Rated system energy	19.2KWh
Parallel racks /Modules	1 Rack
Rack rated Voltage	240V
Rack Rated Capacity	80Ah
Rack configuration	5Module
Module Rating	48V 80Ah
Module configuration	15S1P
Charge Current	Up to 0.3C
Discharge Current	Up to 1C
Cycle life at standard charge & discharge, 80% DOD, 25°C	≥2500
Rack Material	Sheet Metal (Sheet thickness ≥1 mm)
Rack Finish	Powder coated
IP rating	IP 20 (Perforated)
Protection	Under-Over Voltage Protection, over current Protection, Short Circuit, Reverse polarity, Over temperature
Minimum Metering/ Display Functions	SOC monitoring, RS485 or CAN communication
Cell Specification	
Model	LFP cell
Cell Type	Prismatic
Rated voltage (V)	3.2 V
Rated capacity (Ah)	80 Ah
Standard Charge / Discharge Rate	Up to 0.3C / 0.5C
Charge and discharge cut-off voltage(V)	2.5-3.65 V
Cycle life at standard charge & discharge, 80% DOD, 25°C	≥3000
Battery Warranty Period	Minimum 5 years

SR NO	ELIGIBILITY CRITERIA	REQUIRED DOCUMENTS
1	Vendors/Bidders should be a firm/company having a GST No, PAN, Email id, Permanent Address in Kolhapur & Contact Number.	<ol style="list-style-type: none"> 1. Certificate of Incorporation/Partnership Agreement 2. GST Certificate 3. PAN Card
2	Vendor should be a manufacturer of UPS System.	<ol style="list-style-type: none"> 1. Udyam Registration Certificate
3	Vendor should have minimum 15-20 years of experience in UPS & Battery Supply & Maintenance services preferably to scheduled/nationalized/co-operative banks.	<ol style="list-style-type: none"> 1. Provide Work Completion Reports/Purchase Orders
4	Vendor should have minimum 5 engineers & 3 battery technicians on payroll present in Kolhapur.	<ol style="list-style-type: none"> 1. ESI Registration Certificate 2. PF Registration Certificate
5	Vendor should have minimum 5 LFP Battery Pack installations (minimum 1 of them should be for ON-LINE application in Banking Sector) in Kolhapur working satisfactory.	<ol style="list-style-type: none"> 1. Provide Work Completion Reports
6	Vendor should have average yearly turnover of Rs.500 Lacs or more for the last 3 years along with profit making & audited financial statements (average net profit should be Rs.20 Lacs or more).	<ol style="list-style-type: none"> 1. Audited financial statements for the last 3 years
7	Vendor should have 24 x 7 Service centre at Kolhapur & service escalation matrix up to management level for service-related issues.	<ol style="list-style-type: none"> 1. Escalation Matrix

Authorized Signatory Name
Designation

Annexure-A

Instructions to Vendors

Submission of Proposals (Methodology)

The Proposal shall be submitted in **two separate sealed envelopes** – one containing the **Technical Bid**, hereinafter referred to as '**Technical Proposal**', and the other containing the **Financial Bid**, hereinafter referred to as the '**Price Proposal**'. Your financial bid must be final and non-negotiable. Please note there will not be any negotiations

The envelope containing the **Technical Proposal** shall be super-scribed: **"TENDER REF NO 01 TECHNICAL PROPOSAL – DO NOT OPEN BEFORE 16 April 2022."**

Whereas the envelope containing the **Price Proposal** shall be super-scribed: **"TENDER REF NO 01 – PRICE PROPOSAL"**

The Technical Proposal shall comprise of:-

- (a) Tender Fees (Demand Draft of a reputed Bank, favoring **The Commercial CO-Operative Bank Ltd., Payable at Kolhapur**);
- (b) Bid Security (Demand Draft of a reputed Bank, favoring **The Commercial Co-Operative Bank Ltd., Payable at Kolhapur**);
- (c) Technical Proposal as per **Annexure-B**

Any Technical Proposal not containing the above shall be rejected.

Any Technical Proposal containing any price information shall be rejected.

The Price Proposal shall comprise of:

- (a) **Annexure- C** (Price Proposal)

Any Price Proposal not submitted in the format attached shall be rejected.

Annexure-B

TECHNICAL PROPOSAL

(Ref No 01 Dated 07 April 2022.)

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF
15 KVA ON-LINE UPS SYSTEM AT THE COMMERCIAL CO-OP BANK LTD.,
KOLHAPUR

Parameters	Technical specification	Complied (Yes/No)	Deviation, if any
Technology & Topology	IGBT Based PWM Inverter using Micro Controller		
	Online Double conversion Type		
Active Power Factor Correction	In built design		
Input power factor	Better then 0.90		
Input Frequency Range	50 Hz +/- 6 %		
Output power factor	0.8 to 1 lag		
Input (Voltage)	415 VAC +15 %, -20 %		
Output (Voltage)	230 VAC +/- 1 %		
Frequency	50 Hz +/- 0.5 %		
Waveform (Output)	PWM Sine wave		
Isolation Transformer	Inbuilt Galvanic Isolation Transformer		
Transient Recovery	.+ 4 % from 0 to Full load and corrected within 60 msec.		
Harmonic Distortion	Less than 3 % on Linear Load		
Minimum Metering/ Display Functions	Mimic Display, Mains on, Inverter On, Battery Low, Over Load, Output Under Voltage, Output Over Voltage, DC Over Voltage, I/p Single Phasing / Phase Reversal		
Audible Alarm	Intermittent beep for 30 sec. On mains fail. Battery low pre-alarm at 80 % of Battery discharge. Intermittent Beep for all other Trip Conditions		
Inverter efficiency	Greater than 90%		
UPS type	ON-LINE		
Maximum charging Current	Vendor to specify		
Battery type	Lead-Acid Tubular/LFP Battery Pack		
Overload capacity	110% for 60 min.		
	125% for 10 min.		

	150% for 1 min		
Noise level	<60db at 1 Meter		
Design ambient	0-50° C		
Relative Humidity	Max. 95 % Non-Condensing		
Enclosure	M.S. Powder coated with castor wheels		
Protection	Output short circuit, Battery low trip, DC over voltage, Output under voltage / over voltage, Input under voltage / over voltage, I/p Single Phasing / Phase Reversal, Over Temperature		
UPS Warranty Period	Minimum 3 years		

OR

Parameters	Technical specification	Complied (Yes/No)	Deviation, if any
Technology & Topology	IGBT Based PWM Inverter using Micro Controller		
	Online Double conversion Type		
Active Power Factor Correction	In built design		
Input power factor	Better then 0.90		
Input Frequency Range	50 Hz +/- 6 %		
Output power factor	0.8 to 1 lag		
Input (Voltage)	230 VAC +15 %, -20 %		
Output (Voltage)	230 VAC +/- 1 %		
Frequency	50 Hz +/- 0.5 %		
Waveform (Output)	PWM Sine wave		
Isolation Transformer	Inbuilt Galvanic Isolation Transformer		
Transient Recovery	.± 4 % from 0 to Full load and corrected within 60 msec.		
Harmonic Distortion	Less than 3 % on Linear Load		
Minimum Metering/ Display Functions	Mimic Display, Mains on, Inverter On, Battery Low, Over Load, Output Under Voltage, Output Over Voltage, DC Over Voltage, I/p Single Phasing / Phase Reversal		
Audible Alarm	Intermittent beep for 30 sec. On mains fail. Battery low pre-alarm at 80 % of Battery discharge. Intermittent Beep for all other Trip Conditions		
Inverter efficiency	Greater than 90%		
Overall efficiency (ECO Mode)	Greater than 98%		
UPS type	ON-LINE		
Maximum charging Current	Vendor to specify		
Battery type	Lead-Acid Tubular/LFP Battery Pack		
Overload capacity	110% for 60 min.		
	125% for 10 min.		
	150% for 1 min		
Noise level	<60db at 1 Meter		
Design ambient	0-50° C		
Relative Humidity	Max. 95 % Non-Condensing		
Enclosure	M.S. Powder coated with castor wheels		
Protection	Output short circuit, Battery low trip, DC over voltage, Output under voltage / over voltage, Input under voltage / over voltage, I/p Single Phasing / Phase Reversal, Over Temperature		
UPS Warranty Period	Minimum 3 years		

Battery System Configuration			
Item	Technical specification	Complied (Yes/No)	Deviation, if any
Cell Chemistry	LFP		
Rated system energy	19.2KWh		
Parallel racks /Modules	1 Rack		
Rack rated Voltage	240V		
Rack Rated Capacity	80Ah		
Rack configuration	5Module		
Module Rating	48V 80Ah		
Module configuration	15S1P		
Charge Current	Up to 0.3C		
Discharge Current	Up to 1C		
Cycle life at standard charge & discharge, 80% DOD, 25°C	≥2500		
Rack Material	Sheet Metal (Sheet thickness ≥1 mm)		
Rack Finish	Powder coated		
IP rating	IP 20 (Perforated)		
Protection	Under-Over Voltage Protection, over current Protection, Short Circuit, Reverse polarity, Over temperature		
Minimum Metering/ Display Functions	SOC monitoring, RS485 or CAN communication		
Cell Specification			
Model	LFP cell		
Cell Type	Prismatic		
Rated voltage (V)	3.2 V		
Rated capacity (Ah)	80 Ah		
Standard Charge / Discharge Rate	Up to 0.3C / 0.5C		
Charge and discharge cut-off voltage(V)	2.5-3.65 V		
Cycle life at standard charge & discharge, 80% DOD, 25°C	≥3000		
Battery Warranty Period	Minimum 5 Years		

SR NO	ELIGIBILITY CRITERIA	REQUIRED DOCUMENTS	ATTACHED (YES/NO)
1	Vendors/Bidders should be a firm/company having a GST No, PAN, Email id, Permanent Address in Kolhapur & Contact Number.	1. Certificate of Incorporation/Partnership Agreement 2. GST Certificate 3. PAN Card	
2	Vendor should be a manufacturer of UPS System.	1. Udyam Registration Certificate	
3	Vendor should have minimum 15-20 years of experience in UPS & Battery Supply & Maintenance services preferably to scheduled/nationalized/co-operative banks.	1. Provide Work Completion Reports/Purchase Orders	
4	Vendor should have minimum 5 engineers & 3 battery technicians on payroll present in Kolhapur.	1. ESI Registration Certificate 2. PF Registration Certificate	
5	Vendor should have minimum 5 LFP Battery Pack installations (minimum 1 of them should be for ON-LINE application in Banking Sector) in Kolhapur working satisfactory.	1. Provide Work Completion Reports	
6	Vendor should have average yearly turnover of Rs.500 Lacs or more for the last 3 years along with profit making & audited financial statements (average net profit should be Rs.20 Lacs or more).	1. Audited financial statements for the last 3 years	
7	Vendor should have 24 x 7 Service centre at Kolhapur & service escalation matrix up to management level for service-related issues.	1. Escalation Matrix	

All the Terms & Conditions mentioned in the Tender Document are acceptable to us.

Date:

Place:

Signature of Authorized Signatory with seal

Annexure-C

PRICE PROPOSAL

(Ref No 01 Dated 07 April 2022.)

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF
15 KVA ON-LINE UPS SYSTEM AT THE COMMERCIAL CO-OP BANK LTD.,
KOLHAPUR

SR NO	BOQ	QTY	UNIT PRICE (RS.)	GST AMT. (RS.)	WARRANTY (MONTHS)
1	15 KVA/240 V DC, 3PH-1PH, ON-LINE UPS System	1			36
OR	15/240 V DC, 1PH-1PH, ON-LINE UPS System with ECO Mode	1			36
2	Exide EL+/Quanta Tubular Batteries 12V/100 AH	20			60
OR	19.2 KWH LFP ESS Battery Pack with BMS	1 PACK			60
3	2PH to 1PH Isolation Transformer	1			12
4	Buyback of 3 KVA/72 V DC ON-LINE UPS	1			NA
5	Buyback of 150 AH Tubular Batteries	6			NA

We hereby agree to the Terms & Conditions of Tender and the above quoted rates are valid up to **12 months** from the Date of Opening of Tender.

Date:
Place:

Signature of Authorized Signatory with seal