



KERALA PUBLIC SERVICE COMMISSION

File No: RA1-2/50020/2018-KPSC

Thiruvananthapuram

Dated : 21.02.2023

E-TENDER NOTICE

Inviting E-Tender for the supply and installation of 10 KVA UPS for the office use of the Kerala Public Service Commission, District Office Thiruvananthapuram.

E-Tender in one cover system is invited from competent dealers and manufactures for the supply and installation of 10 KVA UPS in accordance with respective specifications as shown in Annexure I of the Tender document.

Sl.No.	Item	Qty(Nos)	Cost of Tender (Forms) Rs	EMD fixed (Rs)
1	10 KVA UPS	1 (One)	1000/-	12,500/-

Tenders shall be submitted as e-tender through <https://etenders.kerala.gov.in>. Bidders who have enrolled in the above portal with their own digital signature certificate (DSC) can participate in the tender. For obtaining digital signature certificate (DSC) and necessary portal enrollment bidders can visit the above website. E-Tender document and other details can be obtained from the above e-portal.

Tender Number	:	05/2023/SN
Document download/sale start date	:	21/02/2023
Bid submission start date	:	21/02/2023
Document closing date	:	07/03/2023 – 5.00 pm
Date & Time of opening of tender	:	09/03/2023 - 2.30 pm

Cost of e-Tender & EMD (Online payment) :-

Payment as shown in the above table including EMD should be made as a single payment through online.

Dates upto which rates are to remain firm for acceptance	90 Days
Performance security:	5% of the contract value
Period of supply :	within 15 days of supply Order

The bidder desiring to take part in the bid shall log in to <https://etenders.kerala.gov.in> and then select tender and initiate payment. Bidders will be directed to the online payment gateway page and they shall make payment as directed therein.

The e-tenders submitted by the competent dealer should definitely contain a scanned and signed copy of the declaration of product offered to supply and dealership certificate from the manufacturer.

Tenders will be opened in the online presence of each bidders or their authorized representatives who have logged in at the prescribed time of opening.

If the date fixed for opening happens to be holiday or due to net failure the tenders will be opened in the next working day at the same time. The price of the e-tender form will be received only through online payment methods stipulated in the website.

Scanned copy of the agreement (Annexure II) in the prescribed format in Kerala Stamp paper worth Rs.200/- shall be submitted online and original shall be given to the Secretary, Kerala Public Service Commission before opening of e-tender.

The rates should be quoted in Indian Currency only. Details with respect to the e-tender and the details of specifications (Annexure I) of the item to be supplied can be obtained from the e-tender website <https://etenders.kerala.gov.in>.

The Secretary, Kerala Public Service Commission, Pattom will scrutinise the tenders received and will take necessary action for the award of contract.

The right of acceptance or rejection of any e-tender in full or in part without assigning any reasons thereof is reserved with the Secretary.

The rules and regulations prescribed for e-tenders by the Government of Kerala, shall be applicable to this e-tender also.

Terms and Conditions:

1. The make, model, year of manufacture etc of the UPS shall be clearly mentioned.
2. **Three (3) years Comprehensive Onsite OEM warranty for UPS and three years replacement warranty for battery should be assured. Dealership/Authorization and Warranty Certificates from OEM shall be submitted with the tender. Dealership warranty will not be accepted.**
3. All charges, taxes, duties and levies should be clearly indicated.
4. The items should be supplied to the office of the Kerala public Service Commission, Pattom, Thiruvananthapuram-4 at the expense of the Tenderer.
5. **The Product should be supplied within 7-10 days from the date of Purchase Order, otherwise the tender will be cancelled without any prior intimation..**
6. The installation, commission and initial operation to the satisfaction of the KPSC will be the responsibility of the supplier.
7. The payment will be made after completion of supply, installation and commission subject to the certification by our Technical Experts as to the quality and efficiency of the item supplied.
8. In case of under performance during the warranty period, the item should be replaced and period of warranty will recommence from the date of replacement.
9. The Performance Security Deposit will be released after the expiry of Warranty Period.

Any legal disputes that may arise in relation to the e-tender formalities will be restricted to jurisdiction of Thiruvananthapuram District.

The communications should be addressed to :

The Secretary,
Kerala Public Service Commission,
Pattom, Thiruvananthapuram,
Kerala-695004.

Sd/-
Saju George
Secretary
Kerala Public Service Commission

Note:- More details can be had from the office of Additional Secretary, R&A wing, Kerala Public Service Commission, Pattom, Thiruvananthapuram-4.

10 kVA UPS Specification

Features : Singlephase, solid state, static UPS. The UPS and associated equipment shall operate in conjunction with a primary power supply (utility and/or on site generation) and an output distribution system to provide quality uninterrupted power for mission critical, electronic equipment load. The system shall consist of a solid state IGBT rectifier and inverter, power factor corrected rectifier, a 100 percent rated, continuous-duty static switch, graphical status panel, and synchronizing circuitry as described herein.

The UPS rated for unity power factor 10 KVA= 10 KW
Online Double Conversion with isolation Transformer inbuilt at Input Side
The UPS control logic shall incorporate state of the art digital signal processing.
The inverters shall utilize high speed pulse width modulation.
The UPS shall require rear or side access for maintenance or repair.
Cooling shall require air intake from the front and side and air exhaust from the rear of the UPS.
The UPS shall include fan with variable speed that are field-replaceable.
The UPS shall be capable to be synchronized with mains supply.
The UPS shall support frequency conversion.
The UPS shall manage, by software setup, cycling battery recharge and test automatically.
UPS shall be capable of integrated parallel operation up to N+4.
Higher efficiency modes of operations such as ECO mode
3-level inverter and rectifier technology

Standards / Certification :

ISO 9001, "Quality Management Systems Requirements."
ISO 14001, "Environmental Management Systems - Requirements with Guidance for Use."
ISO 45001: 2018 "Occupational Health and Safety Assessment"

CE Certificate (EN 62040-1: 2019, - Part 1: General and safety requirements for UPS)
CE Certificate (EN / IEC 62040-2: 2018, - Part 2: Electromagnetic compatibility (EMC) requirements)
Surge - EN 61000-4-5:2014+A1:2017; ESD - EN 61000-4-2:2009; Power-frequency magnetic field - EN 61000-4-8:2010 ; Low-frequency signals - EN 61000-2-2:2002
IEC 62040-3, "Uninterruptible Power Systems - Method of Specifying the Performance and Test Requirements." – From NABL approved testing agency
RoHS Compliance
BIS – Make in India required

System Characteristics:

Input: The system input shall be configurable from single inputs source.

Input voltage: 230 V, 50/60Hz single-phase, 1P + PE

Input voltage window: +25 percent to -20 percent continuous @ 100% Load

Frequency: 45 to 55 Hz

Input Power Factor Correction: 0.99 @ > 50% load

Switch on time: UPS shall have programmable and adaptive walk in duration 5-30 sec

Input Current Total Harmonic Distortion (THDI): < 5% @ 100% load

UPS Output:

Output Voltage: 220 / 230 / 240 V, 50/60Hz, 1 PH, 3-wire 1P+PE

Frequency: 50 hertz, $\pm 0.1\%$ (free running)

Output voltage regulation : $\pm 1\%$ for 100% linear load.

Output Voltage Transient Response: The output voltage returns to within $\pm 5\%$ of the steady state value within 20ms.

Output Power Factor: 1.0

Output Voltage Transient Characteristics: 100% load step change +5%

Output Voltage Total Harmonic Distortion (V-THD):

< 2% at 100% linear load

< 5% at 100% non-linear load

Crest Factor: 3:1

Overload Rating: Normal & Battery Operation

105-110% continues operation with warning.

111% to 130% for 5 min

131% to 150% for 1 min

System AC-AC Efficiency:

>86% in normal operation 100% load

Up to 98% in ECO mode

Battery

Battery Voltage: 240 volts DC.

Battery Make : EXIDE / QUANTA

Battery VAH : 24000 VAH

Backup : 90 min

Charge current: 10 % of the Battery AH Capacity.

Deep Discharge Protection : The ups shall be provided with control circuits to limit the

level of discharge on the battery system. These control circuits shall be capable of varying

the shutdown level to accommodate any type of battery recommended for UPS application.

Cold Start: If DC bus is already energized, UPS shall be able to start from battery power if

no utility power is available at the UPS input.

Energy Storage: Valve regulated sealed lead acid (VRLA)

Operating ambient temperature: 0 to 40°C

Maximum installation with no derating of the UPS output shall be 1000 m above sea level.

Audible Noise: <50 dBA at 100% load

Front Panel LCD Display: The UPS control panel shall provide a user friendly display for indication of UPS status for the overall system metering, battery status, alarm, and advanced operational features.

Access: The display shall provide access to:

LCD for Measurements, fault codes and Mimic diagram UPS power flow.

LED for Mains, Bypass, Parallel, ECO and Fault

System Parameters Monitored: The visual display shall include, but shall not be limited to,

the following system parameters based on true RMS metering:

Measurements:

Input voltage

Input frequency.

Bypass voltage.

Bypass input frequency.

UPS output voltage.

UPS output frequency.

UPS output percent load.

Battery voltage.

Protection : Over Load, Over Temp, Short Circuit, Back feed, Input high / low, DC Low.

Audible Alarm Reset: The UPS shall provide an audible alarm that can be stopped using the user interface.

Emergency Power Off (EPO): required for emergency power off

RS 232 / USB port: Shall be provided for field diagnostics.

Warranty for UPS and Battery : **2** Years

MAF : Manufacturer's Authorization required