Department of Computer Science and Automation, Indian Institute of Science seeks quotes for UPS system with the following specifications.

## **Specification for ONLINE UPS**

#### 1. Output capacity: 20 KVA with 1 Hour backup

Technology: IGBT based On Line, Dual Conversion, in-built Output

Isolation Transformer, DSP based Control

#### 2. Converter:

AC Input: Three Phase

Voltage range: -20% +15%

Frequency:50 Hz

Frequency variation: + - 3Hz

Input Power factor: > 0.97 from 50% load to 100% load.

Harmonic current :<5%

#### 3. Inverter:

AC output: Single Phase

Rating: Continuous

Technology: DSP Controlled, IGBT based PWM converter

Voltage: 230 V

Regulation: + -1%

Frequency:50Hz

Inverter efficiency: Better than 90%

Waveform: SineWave

Distortion: < 2%

Transient Voltage variation: + -5V

Transient Recovery: Within 1 or 2 Cycles

Rated Power Factor: 0.8

Overload Capacity: 120% for 10 Mins, 150% for 60 Secs Cooling

:ForcedAir

**Isolation:** Galvanic Isolation has to be provided with a built in K-13

rated isolation Transformer at the O/P of Inverter.

Total Harmonic Distortion :<5%

### Battery with I/C cables:

Type: Exide Tubular 6EL100

DC Busbar Voltage :360VDC

Charger: Suitable for Exide Tubular battery

Number of Batteries: 30

## 4. Monitoring: I/P AC Voltage

O/P AC Voltage & Current DC Battery Voltage & Current

Audio Alarm: Buzzer for battery low, Indicator Lamps

Mains ON, Output ON, Inverter ON, Battery low, Inverter overload,

Inverter trip.

# 5. Protections: Output over Voltage Trip

Output Overload/Short Circuit trip Battery short by HRC Fuse Charger Overload Trip

**Battery Low** 

6. Bypass: Manual Bypass has to be provided

7. Warranty: 3 years

Note: Strictly better specification will also be considered.

### **Terms & Conditions**

- The product should be ISO certified
- The quotes should be submitted in sealed covers.
- The deadline for submission of proposals quotes is 31<sup>th</sup> March 2022 before 12 noon.
- Quotes can mention the price for one and for two quantities (separately) and based on the availability of funds department will place an order for either one or two quantities.
- Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
- The quotations should be on FOR-IISc Bangalore basis in INR only
  You may quote the reference as: CSA/CB/204 Dt: 03.03.2022
- You may submit your quotations through email also.
- The sealed covers should be submitted to the following address:

Department of Computer Science and Automation

Indian Institute of Science,

Bangalore 560012.

Phone: 080 22933201

Email:office.csa@iisc.ac.in