

**THE GANDHIGRAM RURAL INSTITUTE
(DEEMED TO BE UNIVERSITY)
RE-ACCREDITED BY NACC with 'A' Grade (3rd Cycle)
DEPARTMENT OF CHEMISTRY**

Dr. S. Meenakshi Gandhigram – 624 302

Professor and Head

Dindigul District

Ref: GRI/Chem/2018-1930.11.2018

Sub: Supply of **5 KVA online UPS system (Transformer model with sine wave)** for the
Department of Chemistry, GandhigramRural Institute,Gandhigram – reg.

For and behalf of The Gandhigram Rural Institute, Gandhigram Quotations / limited tenders are invited induplicate for the supply of the following materials / items of work.

Name and specification details.

1. 5 KVAonline UPS system with 4 Hr Back up.

Specifications For the Online Ups With Isolation Transformer

Input Mains	Rated Voltage(V)		220V(Line Voltage)
	Rated Voltage & Range(V)		220V±25%
	Frequency & Range(Hz)		46Hz-54Hz, 56Hz-64Hz
Bypass Input	Rated Voltage(V)		220V
	Rated Voltage & Range(V)		220V±25%
	Frequency & Range(Hz)		46Hz-54Hz, 56Hz-64Hz
Input / Output	Rated Power		5KVA Min 14814 VAH
	Technology		IGPT
	Rated Voltage(V)		220V(Line Voltage)
	Rated Voltage & Stability		200/208/220/230/240VAC Phase Voltage
	THDV	Linear Load	≤3%
		Non-linear Load	≤8%
	Output Power factor		0.8(Lag)
	Tracking Frequency & Range(Hz)		46Hz-54Hz, 56Hz-64Hz
	Frequency & Stability(Battery Inverter)		(50±0.1)Hz, (60±0.1)Hz
	Overload Capability		Less than 105%±5% for overload alarm;

		105%±5%~125%±5% for 2 minutes;125%±5%~150%±5% for 30 second; More than 150%±5% for 0.5 second;					
	Switching time (Normal mode)	0 ms					
	Isolation Transformer placed be On	I/P & O/P On both sides					
System	System Efficiency(Linear Load)	≥80%	≥82%	≥85%	≥86%	≥87%	
	Display	LCD OR LED					
	EMS/EMI	Transmission Radiation	IEC EN62040-02				
		Immunity	IEC 61000-4-2.4.5 Level IV, IEC61000-4-3 Level III				
	Safety Requirements	GB4943-2001/IEC62040-1					
	Noise Level(1M)	≤55dB					
	Isolate Impedance(Ω)	>2M(500VDC)					
	Surge Current Protection	IEC60664-1 IV					
Environment	Operating Temperature	0oC - 40oC					
	Elevation	<1000m					
	Storing Temperature	-15oC - 45oC					
	Operation Humidity	20% - 95%					
Battery & Back Up Time	Exide Lead Acid Battery	Minimum 4 Hours Back up With wooden stand or MS Rack for housing batteries					
	Warranty	Above 36 to 48 Months					

The Online UPS must be covered with the following features

1. Digital Signal Processors Technology
2. Environment Friendly
3. Active input power factor correction (PFC)
4. Wide range of input voltage and frequency
5. Zero power switch delay
6. Active Load Management
7. Sufficient Expansion Slots
8. The load power factor is 0.8
9. Generator Supportable
10. Wide in-put voltage range
11. True online double conversion
12. Perfect for the most demanding and delicate of lab Instruments
13. Separate Neutral Earthing

The terms and conditions for the quotations are as below:

1. The rate should include duties and taxes and also packing and forwarding charges.
2. If the rates are exclusive of the items mentioned against (1) above, the rate at which these items will be charged should also be specified wherever possible.
3. The guarantee / warranty period should be indicated separately.
4. Where the offer is not from ready stock, the period before which supply will be affected should be indicated.
5. The mode of payment should be specified.
6. Validity of the offer should normally be for 30 days from the date of the offer, if otherwise, the period should be mentioned in the offer.
7. Quotation should be in the name of "The Registrar, Gandhigram Rural Institute, Gandhigram -624 302". and should be sent with all necessary enclosures in a sealed envelope super scribed a "supply of **5 KVA online UPS system** to the Department of Chemistry".
The address on the envelope should be **The Professor & Head, Department of Chemistry, Gandhigram Rural Institute, Gandhigram.**
8. The last date for the receipt if quotation is **20.12.2019** the quotations will be received up to 3.00 p.m. on date.
9. Kindly mention your **TIN number/IGST/GST number** in your quotation.

Thanking you

Yours sincerely

S. MEENAKSHI