## Department of Nanoscience and Nanotechnology, University of Kerala, Kariavattom, Thiruvananthapuram-695581 Phone No. 0471 2308863 Quotation Notice

No. KU/DNST/QN- 02/2020-21

Quotations are invited for the supply of one Number of 5KVA online UPS with the following specifications.

1. 5 KVA ONLINE UPS	
Capacity:	5KVA
Technology:	True online IGBT based technology
INPUT	
Nominal voltage:	220VAC/230VAC
Operating voltage range:	160V-270V
Operating frequency range:	50Hz ± 0.5Hz
Power factor:	0.9
OUTPUT	
Inverter:	IGBT based PWM technology with pure sinewave
	output
Output voltage:	200-250V ± 1%
AC voltage Reg. (Batt. Mode)	± 1%
Frequency range:	50Hz ± 0.5 Hz
Crest factor:	3:1 (max)
Total harmonic distortion:	<3% (linear load), <5% (nonlinear load)
Overload capability:	yes
Power factor:	0.9
Isolation transformer:	Inbulit@output, Inbuilt@input
EFFICIENCY at full load	
Overall efficiency:	Above 80%
Inverter efficiency:	90%
DISPLAY and INDICATORS	AC voltage (INPUT/OUTPUT)
	Output current
	Output watts
	DC voltage
	Mains on
	Battery LOW
	Over load
ΔΙΔΡΜ	Trip, bypass
	Battery low, Output overload&short circuit
Temperature:	$5^{\circ}$ - $55^{\circ}$
Operational humidity:	Up to 85% RH (Non condensing)
Noise Level:	<60db at 1 meter
PROTECTION	RF filter at output
	INCB at EB INPUT
	Shupper circuit across all semiconductors
	wich at input panel

	Surge protector at panel input&EB input
	PV reverse polarity, input low & high voltage,
	output low&high voltage cut off
CERTIFICATIONS	ISO 9001:2015, ISO 14001:2015, ROHS
WARRANTY	5 years comprehensive for UPS
2. BATTERY	
Brand and capacity	AMARON/EXIDE/other leading brand make tubular
	battery for 1 hr.back
Warranty:	With 4 year replacement warranty
3. BATTERY RACK	

GENERAL INSTRUCTIONS:-

- 1. Incomplete & conditional quotations and quotations received after the due date will be summarily rejected without assigning any reasons thereof.
- 2. The price should be inclusive of all taxes, duties, transportation, installation etc. Nothing extra will be paid in addition to the quoted rate.
- 3. Payment Terms: 100% payment after supply and successful demonstration of the working of the equipment.
- 4. Validity of quotation: Quotation submitted shall remain valid at least for 90 days from the date of opening the quotation.
- 5. Delivery and installation: Proposed delivery schedule should be mentioned clearly. Delivery and installation should be made at the Department of Nanoscience and Nanotechnology, University of Kerala, Kariavattom campus, Trivandrum- 695581, without any extra cost.
- 6. Service facility: Supplier should mention their details of service setup and manpower in Trivandrum who are responsible for after sales support.
- 7. The model number, make, and a printed literature of the product shall be submitted positively.
- 8. Vendors should provide a list of institutes showing installations of such instruments in India with contact numbers.

Sealed quotations should reach the "Head-in-charge, Department of Nanoscience and Nanotechnology, University of Kerala, Kariavattom, Thiruvananthapuram-695581" on or before 02/03/2021, 3:00 PM. Date of opening 02/03/2021, 3:00 PM.

16/02/2021

S/d Head-in-charge