

Technical Specification for 10KVA On-line UPS 3:1 Phase with batteries

1	Input Frequency	40-70 Hz
2	Input Voltage	173-494V (3P)
3	Input Power factor	0.9
4	Output Power Capacity	10 KVA
5	output voltage	220V/ 230 V A.C. \pm 1% single phase
6	Efficiency in full load	>98% in energy saving mode
7	Wave form	Sine wave
8	Input Protection	Circuit Breaker
9	Battery Types	SMF VRLA
10	Operating Temperature	0-50 ⁰ C : It should be capable to deliver approx. 80% of rated output at 50 degree Celsius ambient temperature.
11	Voltage Provided Margin	\pm 5%
12	Phases	3-phase
13	Batteries	12V 150AH Sealed batteries of standard make 20 in number
14	Load Capacity	Capable to deliver 8KW load at 0.9 p.p. (output)
15	Protection	<p>a). Isolation – Separate/ In-built isolation transformer shall be provided for isolation transformer for fully isolation from mains and surge / spike suppressors to be incorporated.</p> <p>b). Current limiting protection (Fuse less Electronic). Built in overload / short circuit protection with snubber circuits for current limit.</p> <p>c). Soft start on Inverter and charger arrangement</p> <p>d). Over voltage / under voltage protection.</p> <p>e). Short circuit / overload protection through MCB /MCCB.</p> <p>h). All other protection systems required for safety of UPS system, such as over temperature protection etc.</p>
16	Run Time (Power Backup)	3 Hrs minimum backup at full load
17	Recharge Time	5 hour(s)
18	Noise Level	At 1 meter from the UPS < 65 decibels
19	Indicators	<p>a). Mains ON with phase indication for single phase / 3 phase separately for all the phases.</p> <p>b). Inverter ON / OFF / FAULTY / TRIP (Reason)</p> <p>c). Battery Low</p>

		d). Static by-pass ON e). Over temperature f). Earth Leakage
20	Alarm	i). Low battery alarm to be provided (ii) % load iii) Failure of inverter iv) mains failure / load on battery alarm to be provided. Both should be audio visual. v) Over temperature alarm in two stages. 1st stage: Warning, intermittent audio alarm. 2nd stage: Tripping, continuous audio visual and resettable.
21	Metering	Digital panel Meter or LCD display system to indicate the following i). A.C. voltage : Input/ output ii). A.C. current : Input/output or % load iii). D.C. battery voltage iv). D.C. Charging / discharging current v). Frequency – Input/ Output
22	Battery set A. SMF VRLA Batteries (To be installed in ventilated room only)	i) Complete with self-standing locking cubicle or cabinet ii) Make like : Exide/ Panasonic, CSB, Numeric/ Ammaraja Rocket/ New Max , U-plus , AMCO best, HBL or equivalent (iii) Note: Only Valve Regulated Lead Acid (VRLA) type SMF batteries with electrolyte In paste form are acceptable. Any other type including calcium batteries are not acceptable date and year of manufacturing of batteries have to specify alongwith Sr. Nos..
23	Battery Details	Vendor to specify, the make of battery they propose to use, they have to submit detailed literature of battery and battery manufacturers capability etc. Following details of each battery to be furnished: Battery Sr. No., Year of Manufacturing, UPS Rating, DC Voltage, Battery AH, Nos., Total VAH & Make
24	Physical Protection	Ventilated Steel Slotted Angle Cage Rack with locking facility to house UPS along with batteries to be provided without any extra cost.
25	Connecting cables	Should be provided by the Vendor
26	Input and Output MCBs	Should be provided by the Vendor
27	Stand	Should be provided by the Vendor to keep the batteries
28	Installation	Should be done at the customer site without any extra cost of accessories, wires, labour, transportation & installation etc.
29	Warranty	Comprehensive onsite warranty; 2 years on batteries and 2 years on UPS
30	Delivery Period	4 weeks