

### Technical specification of UPS and battery

S.No	Specification	
<b>1.0.</b>	<b>Technology</b>	IGBT based On-Line Double Conversion
<b>2.0.</b>	<b>Capacity</b>	
a.	Nominal power (VA)	1kva - 6kva
b.	Active power (W)	0.8KW - 4.8KW
c.	Isolation Transformer	Not required
d.	Output socket	Programable output socket
<b>3</b>	<b>Input Parameters:</b>	
a.	Voltage	230 VAC, (1 Ph +N+E)
b.	Voltage Range	160V-300V on full load,
c.	Frequency	46-54Hz
d.	Power Factor at rated load	>=0.99 at full load or better
e.	Current Harmonic Distortion	Less than 6 % at full load
<b>4</b>	<b>Output Parameters:</b>	
a.	Voltage	220/230/240 VAC +/- 0.5%, 1 Phase
b.	Frequency	50 Hz +/- 0.25 Hz (in Battery Mode) +/- 4% (in Sync)
c.	Output waveform	Pure sine wave
d.	Harmonic distortion	<=3% for Linear load and <=7% for NonLinear load
e.	Overall Efficiency	> 83 % or better
<b>5</b>	<b>Battery Parameters:</b>	
a.	Type	Sealed Maintenance Free Batteries of 12V capacity
b.	Make	Exide / Amara Raja (Quanta)
c.	DC Voltage	As recommended by the manufacturer
d.	Backup time	Based on the VAH
e.	VAH	battery sizing calculation to be enclosed
f.	Battery Rack & Connectors	Powder coated battery rack / stand to be provided for 5KVA model
<b>6</b>	<b>Other Features:</b>	
a.	Static Bypass	inbuilt
b.	Transfer time	< 4 ms in Sync Mode or better
c.	Manual Bypass	Required (inbuilt)
d.	Auto restart from full battery drain mode	Required
<b>7</b>	<b>Other Features:</b>	
a.	LCD Display	UPS status, Input & Output Voltage/ Frequency, Output Load level indicator, fault conditions, discharge timer, battery level
b.	Protection	Input High / Low, Over Load, Short Circuit, Over Temperature
c.	Audible Alarm	Battery Mode, Low Battery, Fault, Over Load
d.	Connections	Input : Terminal Output : Terminal
e.	Communication Port	RS 232 serial port/usb and SNMP manager
f.	Noise Level	< 50 dB at 1 meter distance or better
<b>11</b>	<b>Test Report / Certificate:</b>	
a.	BIS	Required
<b>12</b>	<b>Approved makes</b>	Numeric/ABB/ Vertiv/APC
<b>13</b>	<b>Warranty</b>	1 year warranty for UPS and batteries