



### Standard Features:

- Inbuilt Output Galvanic Isolation (Using K-13 design transformer)
- Fully Electronic Static Switch for Inverter output & bypass side
- Input Phase Reversal Protection
- Manual bypass switch - Available
- Cold start facility available
- Back feed protection available
- Programmable automatic two stage charger compatible with SMFB & VRLA batteries
- Built-in advanced battery management system
- Capable to withstand 100% unbalanced loads.
- SVM based PWM generation
- Make before break bypass operation
- Terminals suitable for armoured power cable

## VERTEX UN-INTERRUPTED POWER SUPPLIES (UPS)

**SINGLE PHASE – 3 kVA – 50 kVA / THREE PHASE – 10 kVA – 500 kVA**

**Vertex Power Solutions Pvt. Ltd.**, is managed by a team of Engineers with over 25 years of experience in the field of Power conditioning Equipment. The Products are manufactured at Chennai, under the brand name of VERTEX.

**VERTEX**, through its quality products & service, has made its presence felt in various segments like Textile, Telecom, Engineering & Automobile, Printing, Packaging, Medical, Analytical, Audio/Video, IT, etc.

**VERTEX UPS** is designed on high frequency PWM technology with fast switching IGBT to get the maximum efficiency.

**Double Conversion UPS** – Out of any available topology, Double conversion online topology is most accepted and strongest topology. This topology uses AC to DC conversion which eliminates all the input harmonics and provides a steady state DC output. From this DC and DC to AC inverter is used to produce a pure sine-wave at fixed voltage and fixed frequency with an isolation transformer at the output. This topology provides absolute isolation from EB mains to the load and the load is protected against all types of power problems.

**Full IGBT Transistors – Excellence performance Characteristic** – These advanced high performance transistors provide a variety of intelligent features like large power capabilities, high speed switching and lower power consumption.

**Low Heat Loss/High Efficiency** – Use of the IGBT permits efficient high speed switching (20kHz), thus reducing heat dissipation in the UPS (Higher efficiency means lower cost per kilo watt to the customer)

# TECHNICAL SPECIFICATIONS – Uninterrupted Power Supply (UPS)

Model	SWE - 11	SWE - 31	SWE - 33
Rating	1 kVA - 10 kVA	5 kVA - 50 kVA	50 kVA - 200 kVA
Power Factor	0.7 lag		
Technology	PWM Using IGBT Technology		
Input Voltage	230 V, +15%, -20%	415 V, +10%, -20%	415 V, +10%, -20%
Input Frequency	50 Hz $\pm$ 5%		
Output Voltage	230 V $\pm$ 2%	230 V $\pm$ 2%	415 V $\pm$ 2%
Output Frequency	50 Hz $\pm$ 1%		
Crest Factor	3 : 1		
Waveform	Sinusoidal		
T.H.D	Less than 5% on Linear Loads		
Efficiency	Better than 85%		
DC Voltage	72 V to 180 V	240 V to 360 V	360 V
Battery Type	SMF / Tubular / Automotive		
Display Type / Parameters Displayed	4-Line LCD Display I/P & O/P Voltages, O/P Current, O/P Frequency, Battery Voltage		
Panel Indications & Alarms	Mains ON, Inverter ON, ON Battery, Low Battery, Overload, Over Voltage, Low Battery Alarm		
Major Alarms – Text Readout – LCD Display	<b>Input</b> : Under /Over Voltage, <b>DC</b> : Over Voltage, <b>Battery</b> : Discharging/Under Voltage/End of Battery Discharge <b>Inverter</b> : Under/Over Voltage IGBT limb fault, Overload, Overload trip, Over Temperature <b>Alternate</b> : Under /Over Voltage, Freq out of range <b>Static Switch</b> : Transfer to Bypass		
Humidity	0 - 95% Non-condensing		
Operating Temperature	0 to 40° C		
Audible Noise	Less than 50 dB		

*Specifications are subject to change without notice, on account of development in product design*

## Options:

- 12 Pulse rectification option
- Hot standby Model available
- Harmonics TRAP LC / Active Filter
- Bypass line equipment option (Servo Stabiliser & Isolation Transformer panel)
- AC Distribution Panel

## Applications:

Data Centres, Banks & Insurance, Hospitals & labs, Telecom, CNC machines, Office & Commercial establishments, Packaging, Printing, Residential, etc.

### Head Office & Works:

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