

**Technical Specification for 20 KVA On-Line UPS System**  
**Three Phase Input & Single Phase out put for 30 Minutes back up time.**

- A) ON LINE DOUBLE CONVERSION TYPE UPS SYSTEMS BASED ON HIGH FREQUENCY PWM IGBT TECHNOLOGY.
- B) INPUT –  
 VOLTAGE – 330 to 460 V  
 FREQUENCY – 50 Hz ±1%
- C) DC INPUT – 360 VOLT DC
- D) **OUTPUT –**  
 METHOD OF OPERATION – REAL TIME WAVEFORM CONTROLLED WITH DSP LOGIC USING VLSI/VHDL/CPLD/FPGA CIRCUITS.
- VOLTAGE – 230V ± 1%  
 REGULATION – +/- 1% under all line and load conditions.  
 FREQUENCY – 50 Hz +/- 0.5%  
 REGULATION – +/- 0.25%  
 WAVE FORM – SINUSOIDAL  
 DISTORTION – MAX. THD < 2% FOR 100% LINEAR LOAD.  
 POWER FACTOR – 0.65 TO UNITY  
 OVERLOAD – 120% FOR 10 MINS  
 TRANSIENT RESPONSE – +/- 5 % OF NOMINAL OUTPUT VOLTAGE FOR STEP LOAD CHANGE FROM 10%  
 TRANSIENT RECOVERY – WITHIN 1 CYCLE TO REGULATION BAND  
 CREST FACTOR – 3:1  
 AUDIBABLE NOISE – LESS THAN 55 DB
- E) INDICATIONS – MAINS ON MAINS FAIL, BATTERY CHARGING, BATTERY CHARGED, RECTIFIER TRIP, INPUT OVER VOLTAGE, INPUT UNDER VOLTAGE, INVERTER ON, BATTERY LOW, OUTPUT OVER VOLTAGE, OUTPUT UNDER VOLTAGE, OUTPUT OVER LOAD.
- F) ALARM – THE SYSTEM WILL SET AN ALARM ON ABOVE INDICATIONS.
- G) PROTECTIONS  
 INPUT/RECTIFIER – INPUT OVERVOLTAGE, INPUT UNDER VOLTAGE, DC OVER VOLTAGE, INPUT OVER CURRENT, BATTERY OVER CHARGING, BATTERY LOW OUTPUT OVER VOLTAGE, SHORT CIRCUIT.