



**Since 1992**

## Salient Features Of Power Master On-Line UPS

**1 PHASE INPUT – 1 PHASE OUTPUT 3 To 10KVA**

- Double Conversion On-Line UPS.
- Built-in Galvanic Isolation transformer.
- Design Based On IGBT / MOSFET.
- Double Edge **High Frequency SPWM** Converter.
- Control & Display Based On **VLSI / FPGA / DSP**.
- Built-In RTWC (Real Time Waveform Controller) .
- Lowest Output THD Less Than 3%
- Excellent Dynamic response & Recovery within one cycle.
- Built-In Rectifier - Inverter With Soft Start Circuit.
- Suitable for All Types Of Batteries.
- Built-In 3 Step **Float Cum Boost Charger** .
- Built-In **Separately Settable** Float and Boost Voltage .
- Built-In Heavy Duty Battery Charger
- Built-In LED Annunciation 16 Channel .
- Interactive 20 x 4 LCD Display With HMI. \*\*
- Manual Bypass \*\*
- Static Bypass Switch \*\*
- \*\* Optional Feature
- **Actual Product Image and Size Differs As per KVA Rating.**



### TECHNICAL SPECIFICATIONS

#### • INPUT

- Input Configuration : Single Phase 2 Wire + earth.
- KVA Rating : 3 To 10 KVA.
- KW Rating : 2.4 To 8 KW.
- Input : Single Phase 230VAC (Wide Range).
- Input Frequency : 50 Hz (+3% - 3%) (53 - 47 Hz).
- Input Converter : Full Bridge Full Controlled.
- Input Cutt Off : Automatic For Input Over / Under Voltage Condition.
- Input Surge Protection : Built In.
- Input Power Walk In : 100% Within 15 To 20 Sec. With Soft Start.
- Input Rectifier Efficiency : Better Than 80%.
- Input Terminal : Suitable Termination Built In.
- Nominal DC Voltage : 180 V Standard.
- Nominal DC Ripple : Less Than 3% .
- Battery Charger Type : Float Cum Boost 3 Step Charger.
- Battery Charging : On Board Selectable 2 / 4 / 8 / 16A.
- Float Voltage : Settable 2.2V To 2.3V Per Cell.
- Boost Voltage : Settable 2.33V To 2.42V Per Cell.
- Battery Type : Suitable For All Type Of Batteries.

• **IP ANNUNCIATION.**

- Input On LED
- DC On LED
- Battery On Charge LED
- Battery Charged LED
- Rectifier Trip LED
- Input UV LED
- Input OV LED
- DC OV LED

• **OUTPUT**

- Output Configuration : Single Phase 3 Wire.
- KVA Rating : 3 To 10 KVA.
- KW Rating : 2.4 To 8 KW.
- Output Isolation : Two Limb Multi Winding Galvanic Isolation Transformer.
- Output Voltage : 230 Volts +/- 1%
- Output Frequency : 50 Hz +/- 0.1% In Free Run Mode.
- Output Power Factor : 0.8 Lag To Unity.
- Output Waveform : Sine Wave **THD Less Than 2%**.
- Output Inverter : IGBT Based Double Edge SPWM RTWC.
- Topology : VLSI / FPGA / DSP Based
- Inverter Efficiency : More Than 90 %.
- Transient : +/- 5% For 50% Step Load Change.
- Transient Recovery : Within 1 Cycle.
- Crest Factor : 1 : 3
- Over Load : 110% For 10 min.
- Humidity : 95% RH (Non Condensing).
- Acoustic : Less Than 65 dB At a Distance 1 Meter.
- Cooling : Forced Air.
- Protection : IP 20
- Operating Temp : 0 - 45 deg. Storage -10 To +65 Deg.

• **OP ANNUNCIATION.**

- Output On
- Input Fail
- Alarm On
- Battery Low
- System Trip
- Output UV
- Output OV
- Output OC

• **METER**

- Output Voltmeter.

• **DIMENTION (Aprox)**

	KVA	3	5	6	7.5	10
➤ Hight ( MM )	➤	650	750	750	800	800
➤ Width ( MM )	➤	350	350	350	450	450
➤ Depth ( MM )	➤	580	650	650	650	650

• **PROTECTIONS**

- Input MCB : Built In
- Input Under Voltage : Electronic.
- Input Over Voltage : Electronic.
- Input Over Current : Circuit Breaker.
- Battery Input MCB : Built In
- Battery / DC Over Voltage : Electronic.
- Battery Over Current : Fuse.

• **PROTECTIONS**

- Battery Input : MCB / MCCB + Fuse
- Inverter Input : Semiconductor Fuse.
- Output Under Volt : Electronic.
- Output Over Volt : Electronic.
- Output Over Current : Electronic + MCB
- Output Short Circuit : Electronic.
- Battery Over Discharge : Electronic.
- Output : MCB / MCCB

• **CONTROL**

- Output On / Off.
- Output Reset.
- Alarm.

