

SUPERB 15KVA /240V

TECHNICAL SPECIFICATION

MODEL - SUPERB 15KVA/20KVA/240V MPPT SOLAR PCU

175VAC ± 10VAC 185VAC ± 10VAC

265VAC ± 10VAC

255VAC ± 10VAC 90VAC + 10VAC

110VAC ± 10VAC

295VAC ± 10VAC

Mains AC high cut recovery W.UPS mode	285VAC ± 10VAC
Input Frequency Range	40Hz to 60Hz
Voltage Output in Mains Mode	Same as input
Frequency Output in Mains Mode	Same as input
Mains Charging Enable/Disable	Yes Provided, Charging mode can be change through front switches
Battery	
Battery Type	LA / Tubular / SMF
DC input voltage	240V
Battery Quantity 12V 100Ah to 220Ah	20
Float charging voltage	230.0/ Battery +/-2%
Boost charging voltage for LA Battery	310.0 / Battery +/-2%
Boost charging voltage for Tubular and SMF Battery	290.0 / Battery +/-2%
Bulk Absorption Battery Voltage	280.0/ Battery +/-2%
Battery deep Discharge Recovery	Yes (Independent Charger to Recover Deep Discharge Battery)
Charging Current By Grid	Disable, 5 Amp, 10Amp
Backup Mode	
Output voltage	230VAC +5% -10% (until battery low alarm)
Switching Element	IGBT Module
Output frequency	50Hz ± 0.2 Hz

No Load current Capacity Discharging current @ full load Low Battery Warning

Output waveform

Output Power Factor

Phase

Product Specification Range of MPPT Solar PCU

Mains Input mode Mains AC low cut UPS mode

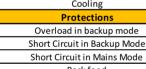
Mains AC low cut recovery UPS mode Mains AC high cut UPS mode

Mains AC high cut recovery UPS mode

Mains AC low cut WUPS mode

Mains AC low cut recovery W.UPS mode Mains AC high cut WUPS mode

Low Battery Cut Change over time UPS mode Change over time WUPS mode Cooling



Back feed Over temperature Reverse Battery

- Phase to Phase protection in mains mode Solar Charge Controller Solar Charge Controller type
- **Switching Element**
- Efficiency
 - Max Panel wattage can be connected Maximum PV Voltage
 - Maximum Battery current
 - **Battery Charging Stages** Reverse PV protection **Switches**
- Sharing of current when PV and Grid Both are

available DOD (Depth of Discharge)

Display and Alarms LCD Initial Display

LCD Status Display LCD Fault / Protection Status Display

Buzzer

Safety **HV Test Input to Earth**

HV Test Output to Earth

IR Test Input to Earth

IR Test Output to Earth

Earth Leakage current in Mains mode

Earth Leakage current in Backup mode **Environment** Operating Temperature

Protection class

Dimension(LXWXH (mm)

Storage Temperature

Operating Relative Humidity

15KW

15KVA

50A ± 2A

- - >93% 5 (Softstart, Boost, Absorbtion, Float, Equalise) Yes provided, it will also display on LCD panel On/Off,Mode selec.,Hybrid/PCU/Smart/UPS
- If PV power is not sufficient enough to charge the battery, system will start sharing battery charging from PV and grid.
- Welcome, SMARTEN Website Address, System Capacity, Charging Till 90VAC and Deep Discharge Battery, Mains ON, Input Voltage, Input Frequency, Battery Voltage, Battery Charging, Battery Charged, Charging Current, Backup Mode, UPS ON, UPS
 - Mains Fuse Blown / MCB Trip, Short Circuit, Overload, Battery Low, High Temperature, Back feed Mains Fuse Blown / MCB Trip, Short Circuit, Overload, Battery Low, High Temperature, Back feed Leakage current <5mA when 1.5kV applied for 1 min Leakage current <5mA when 1.5kV applied for 1 min

- 20KW

20KVA

70A ± 2A

SUPERB 20KVA /240V

- Mains MCB Trip System will shutdown in case of back feed and there is no retry
- Yes provided, if heat sink temperature goes above 100°C System will shut down DC MCB will trip Yes provided

MPPT IGBT Module

300V-600V

60 Amp.

>5MΩ between @ 500VDC

>5MΩ between @ 500VDC

< 2.5mA

< 2.5mA

0°C to 50°C

0°C to 50°C

95% Non-Condensing

IP20

510x460x305

Digitally Filtered Pure Sine Wave ≤ 5% THD

8.0

1Phase-3Wire P,N,E 0.02%

214V±0.4V

210V±0.4V

< 10msec < 25msec

Forced Air cooling(Temp Controlled)

>100% to <120% Load, System will shut down after 3 try.

System will shut down after 3 - retries in case of output short circuit

Grid Reconnect Can set 214V To 250V (10.7V To 12.5 per battery)