



Key Features



**MAXIMUM
SOLAR UTILIZATION**



**INTELLIGENT HYBRID
OPERATION**
SOLAR + GRID + BATTERY



**HIGH-EFFICIENCY
SOLAR CHARGE CONTROLLER**



**SMART LCD DISPLAY
WITH REAL-TIME MONITORING**



**DEEP DISCHARGE
BATTERY RECOVERY**



SAVER SERIES

Advanced Hybrid Solar PCU

The Smarten SAVER Series is a high-performance Hybrid Solar PCU engineered for intelligent and efficient power management across solar, grid and battery sources.

Featuring an advanced MPPT Solar Charge Controller, SAVER maximizes solar energy utilization while intelligently managing available power sources to deliver reliable backup and optimized energy performance.

Designed for demanding residential, commercial and small-business applications, the SAVER Series combines intelligent hybrid operation, efficient solar charging, smart system monitoring and deep-discharge battery recovery in a robust, high-performance power solution. Engineered for smarter energy. Designed for dependable power.

PRODUCT SPECIFICATIONS

MODEL NAME	5.5KVA / 48V	5.5KVA / 96V	6KVA / 72V	7.5KVA / 96V	10KVA / 120V
MAINS MODE					
Mains AC Input Voltage Range (UPS Mode)	185VAC to 255VAC ± 10VAC				
Mains AC Low Cut / High Cut Voltage (UPS Mode)	175VAC / 265VAC ± 10VAC				
Mains AC Low Cut / -High Cut Recovery Voltage (UPS Mode)	185VAC / 255VAC ± 10VAC				
Mains AC Input Voltage Range (WUPS Mode)	110VAC to 285VAC ± 10VAC				
Mains AC Low Cut / High Cut Voltage (WUPS Mode)	90VAC / 295VAC ± 10VAC				
Mains AC Low Cut / -High Cut Recovery Voltage (WUPS Mode)	110VAC / 285VAC ± 10VAC				
Input Frequency Range	40Hz to 60Hz				
BATTERY					
Battery Type	LA / Tubular / SMF				
Battery deep Discharge Recovery	Yes (Independent Charger to recover Deep Discharge Battery)				
Charging Current	15A + / -3A				
BACKUP MODE					
Output Voltage / Frequency	220VAC+ / -10% , 50Hz+ / -0.2Hz				
Output Waveform	Pure Sine Wave ≤ 5% THD				
Low Battery Warning	10.8V+ / -0.2V Per Battery				
Low Battery Cut	10.4V+ / -0.2V Per Battery				
Change Over Time UPS Mode	<10ms				
Change Over Time WUPS Mode	<25ms				
Cooling	Temp. Controlled Fan				
PROTECTIONS					
Overload In Backup Mode	Yes provided , System will give Overload Indication at 101% Load.				
Short Circuit In Backup Mode	System will shutdown after 3 retries in case of Output Short Circuit.				
Short Circuit In Mains Mode	Mains MCB will trip				
Backfeed	System will shutdown & there will be no retry				
Phase To Phase Protection In Mains Mode	Yes, Provided by Electronic means				
Over Temperature	Yes provided, if heat sink temp. goes above 100 degree C. System will shut down.				
Reverse Battery	DC MCB will trip				
SOLAR CHARGE CONTROLLER					
Solar Charge Controller Type	PWM TYPE				
Max Panel wattage can be connected	5500W	6500W	4500W	6500W	8000W
Max PV Voltage	100V	230V	150V	230V	230V
Max PV current	70A	50A			
Reverse PV Protection / Reverse Current Flow To PV	Yes provided, it will also display on LCD panel				
Sharing Of Current When PV & Grid Both Are Available	If PV power is not sufficient enough to charge the battery, system will start sharing battery charging from PV & grid.				
Mode Option	1. Solar >> Grid >> Battery 2. Solar >> Battery >> Grid 3. Grid >> Solar >> Battery	This function not available			
DOD Definition(Depth Of Discharge)	Mains will be connect when battery voltage reach at defined value of the battery voltage.*				
DOD 20%, If Battery Voltage is :	50V ± 0.2V*	This function not available			
DOD 30%, If Battery Voltage is :	48V+ / -0.2V				
DOD 40%, If Battery Voltage is :	46V+ / -0.2V				
DOD 50%, If Battery Voltage is :	44V+ / -0.2V				
Battery Capacity**	UP TO 260AH				
DISPLAYS & ALARMS					
LCD Status Display	Mains ON, I / P Voltage / Frequency, Battery Voltage / Charging / Charged, Charging Current, Backup Mode, UPS ON / OFF, Battery Voltage, Load %, Output Voltage Frequency, Battery Current, PV Current / Voltage , Mains Low Cut / High Cut, Mains Not Available, Mains Frequency Cut Etc				
LCD Fault / Protection Status Display	Mains Fuse Blown / MCB Trip, Short Circuit, Overload, Battery Low, High Temperature, Back feed				
Buzzer	Mains Fuse Blown / MCB Trip, Short Circuit, Overload, Battery Low, High Temperature, Back feed				