



ULTRA

4 KVA - 12.5 KVA

MPPT HYBRID SOLAR PCU



MAX PV INPUT CURRENT 27A*

Designed with 27A PV input current compatible to the market trend of increased I_{mp} in solar panel.



BATTERY

Battery equalization function extend life cycle reserved communication port (RS485, CAN) for BMS.



INTERFACE*

Global cloud platform mobile APP anytime and anywhere open APP support power internet applications.



EASY ACCESS*

Two outputs for smart load management. The second output can be scheduled on & off based on setting point of battery transfer to utility.



OFF-GRID AND ON-GRID

Smarten Ultra series is suitable for on-grid and off-grid application.



PROTECT

Built-in anti-dust kit for harsh environment, AC over current, AC over voltage, over temperature protection.

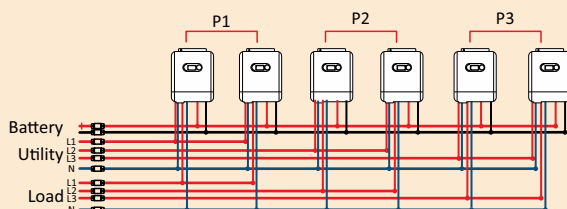
WITH BATTERY CONNECTED



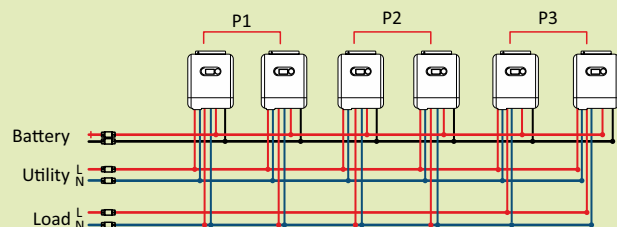
WITHOUT BATTERY CONNECTED



Three phase output using either 3 units (18kW) or max 6 units (36kW)



Single phase output up to 36kW using 6 units



*On selected models only

PRODUCT SPECIFICATIONS

| MODEL NAME | 4KVA/3200W | 4.4KVA/3500W | 5KVA/4000W | 7KVA/6000W | 10KVA/8000W | 12.5KVA/11000W |
|---------------------------------------|--|--------------|---------------|-----------------|-----------------|----------------|
| AC INPUT | | | | | | |
| AC Voltage | 220/230/240VAC | | | | | |
| Voltage Range | 170-280VAC (For Personal Computers), 90-280VAC (For Home Appliances) | | | | | |
| Frequency Range | 50/60Hz (Auto Sensing) | | | | | |
| AC OUTPUT | | | | | | |
| Rated Output Power | 3200W | 3500W | 4000W | 6000W | 8000W | 11000W |
| Surge Power | 6400VA | 7000VA | 8000VA | 12000VA | 16000VA | 22000VA |
| AC Voltage Regulation (Battery Mode) | 220/230/240VAC ± 5% | | | | | |
| Rated Frequency | 50Hz / 60Hz | | | | | |
| Efficiency (Peak) | 93% | | | | | |
| Transfer Time | 10ms (For Personal Computer), 20ms (For Home Appliances) | | | | | |
| BATTERY | | | | | | |
| Battery Voltage | 24 VDC | | | 48 VDC | | |
| Floating Charge Voltage | 27 VDC | | | 54 VDC | | |
| Overcharge Protection | 33 VDC | | | 63 VDC | | |
| Battery Type | Lithium / Lead acid | | | | | |
| SOLAR CHARGER & AC CHARGER | | | | | | |
| Maximum PV Array Open Voltage (V) | 500 VDC | | | | | |
| Maximum PV Array Power | 4000W | 5000W | 7000W | 10000W(5000Wx2) | 13000W(6500Wx2) | |
| MPPT Voltage Range (V) | 60-450 VDC | | | | | |
| Maximum Input Current | 15A | 20A | 27A | 27Ax2(MAX 40A) | | |
| MPPT tracker / strings | 1 | | | 2 | | |
| Maximum Solar Charge Current | 100A | 120A | | 120A | 150A | |
| Maximum AC Charge Current | 80A | 100A | | 120A | 150A | |
| Maximum Charge Current | 100A | 120A | | 120A | 150A | |
| PROTECTION & FEATURE | | | | | | |
| AC Overcurrent | Yes | | | | | |
| AC Overvoltage | Yes | | | | | |
| AC Temperature Protection | Yes | | | | | |
| Smart Load Management | Yes | | | | | |
| On Grid | Yes | | | | | |
| Parallel Function | Yes (Optional) | | | | | |
| CT Anti-backflow Function | No | | | | Yes | |
| GENERAL PARAMETERS | | | | | | |
| Operation temperature | -10°C - 50°C | | | | | |
| Relative Humidity | 5% - 95% (Non-condensing) | | | | | |
| Attitude | (2000m Derating) | | | | | |
| Dimesnions DxWxH (mm) | 348x254x105 | 358x295x105 | 126.5x302x400 | | 541x480x400 | 136x440x540 |
| Net Weight (Kg) | 5.5 | 6.2 | 9 | 10 | 19.4 | 18.5 |
| DISPLAY AND COMMUNICATION | | | | | | |
| Display | Touch Buttons | | | | | |
| Interface | Standard; RS232, USB, CAN&RS485; Optional: WiFi, Bluetooth | | | | | |
| Safety Standard | EN/IEC62109-1, EN/IEC62109-2 | | | | | |

ACDB/DCDB with adequate SPD is mandatory

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