

8. SPECIFICATIONS

Smart Rack/Tower Convertible Model 5000VA / 6000VA

General Features:

- Smart backup time estimation
- Adjustable voltage-transfer points & charging voltage.
- Generator compatible
- Automatic restart of load after UPS shutdown
- Smart AVR function (Two buck / boost modes)
- Cold-start capable
- Audible alarm
- Hot-swappable batteries
- Network manageable (SNMP slot ready)
- Full function of LCD display
- Smart battery management
- Intelligent double stages of charging control



Output

	200V / 220V / 230V / 240V Model
Power Levels crated at nominal inputs	5000VA / 3500W ; 6000VA / 4000W
Output Voltage	200V/220V/230V/240V Selectable
Voltage Waveform	Sine wave
Crest Factor	3 : 1
Output Frequency (Synchronized to Mains)	Auto Select for 50/60Hz 47Hz ~ 55Hz for 50Hz nominal; 56Hz ~ 65Hz for 60Hz nominal
Regulation (Nominal)	±5% typical of nominal voltage (optional at ±8% AVR for wide I/P up to ±35%)
Regulation (Batt. mode)	±3% of selected output voltage (adjustable with the remote set-up software)
Transfer time	Blackout 3ms; Brownout 1ms; Battery mode to Normal mode : 1ms typical
Over current protection	Over load alarm level 100% ~ 120%; Over load shutdown level 120% ~ 190% (Adjustable with the remote set-up software)

Input

Nominal Voltage	200V/220V/230V/240V Selectable
Input Frequency	47Hz ~ 65Hz, 50/60Hz auto-sensing
Efficiency (Normal mode)	97%

Noise Filtering	Full time EMI/RFI filtering
Over current protection	by re-settable over current protector
Voltage Range	-20% ~ +24% for selected nominal voltage. -29% ~ +33% adjustable by using the remote set-up software
AVR Range (2 Bucks, 2 Boosts)	Enhanced Buck: +15% of selected nominal voltage Buck mode: +5% of selected nominal voltage Boost mode: -5% of selected nominal voltage Enhanced Boost: -12.5% of selected nominal voltage
Surge Protection	760 Joules
☐ Battery	
Battery type / number	Maintenance-free sealed, valve-regulated, Lead-Acid 12V, 7Ah x 12 pcs (6 pcs per pack x 2)
Voltage	72Vdc
Typical backup time at half-load	5000VA : 14 minutes 6000VA : 12 minutes
Typical backup time at full load	5000VA : 5 minutes 6000VA : 4 minutes
Charging method	Smart pulse charging with two charging modes : Quick charging when battery is not fully charged, trickle charging when battery is 90% fully charged.
Charging time	Less than 3 hours to 90% at normal line and normal temperature.
Charging current	6A (Max.)
Average charging voltage for each battery	Quick charging mode : 14V maximum. Trickle charging mode : 13.2V ~13.9V adjustable with the remote set-up software.
Protection	Over current protection & Over charging voltage protection Thermal protection (CPU control) : When temperature inside UPS is over 42°C, charger will stop charging for 2 minutes followed by a 2 minutes charging. The cycle will be repeated until the temperature is lower than 41°C.
Monitoring	Smart monitoring & warning for failed battery or open-circuit battery. Auto-detection each time when power on or every 6 days.
☐ Communications & Management	
Standard Interface port	UPSilon2000 compatible. RS-232, RJ-11, & SNMP slot included
Optional Interface port	USB, RJ45, & Extra RS-232/DB-9 port (2 more, at most)
Control panel	LCD
Audible alarm	Alarm on battery : Low battery & Battery over voltage Alarm on abnormal operation : Over load, Short-circuit, & Over heat
EBT (Estimation of Backup Time) system	Support for LCD display

Green mode function (Auto-shutdown during blackout)	1% to 14% of full load (adjustable with the remote set-up software) The default setting is OFF.
☐ Environmental and Safety	
Operating Temp.	Up to 1500 meters : 0°C to 40°C (32°F to 104°F)
Transit/storage Temp.	-15°C to 55°C (5°F to 131°F)
Relative Humidity	5 - 95% non condensing
Operating Altitude	0 ~ 3000 meters
Audible noise	≦40 dBA (at 1M from surface of unit)
Safety Markings	CE & BSMI
EMC	Class B, EN50091-2, FCC part15, IEC1000-2-2
Quality control system	ISO 9001
☐ Physical	
Dimensions: (H×W×D) Unit / Shipping	4u x 52 (cm) / Main unit (64 x 60 x 40cm), battery packs (45 x 18 x 13cm) * 2sets
Weight: Net / Gross (kg)	5KVA : 68 / 75 (kg) 6KVA : 70 / 77 (kg)
Packing	Export carton for each unit, 6 ~ 10 units per pallet