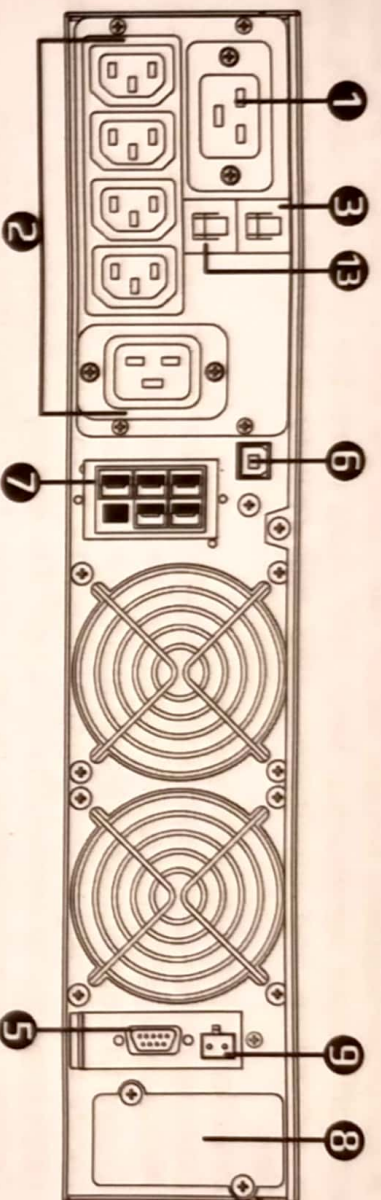


# U P S

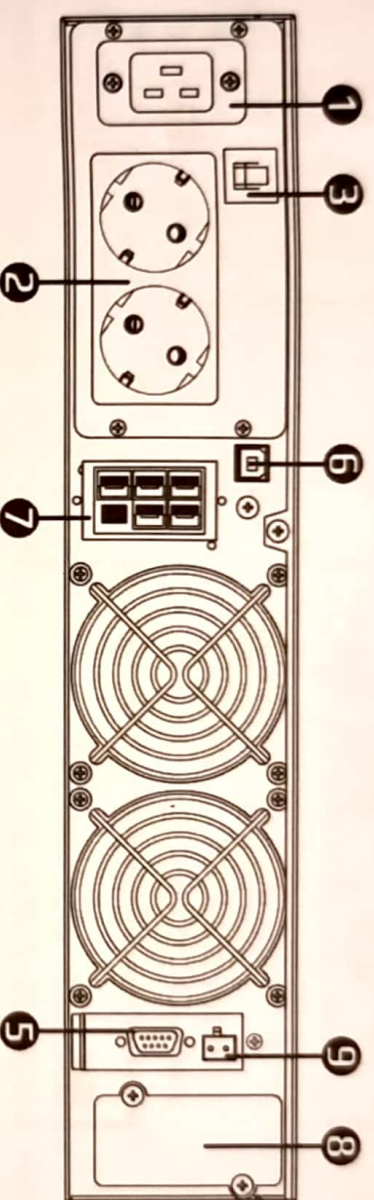
**On-Line**

**1KVA-3KVA**

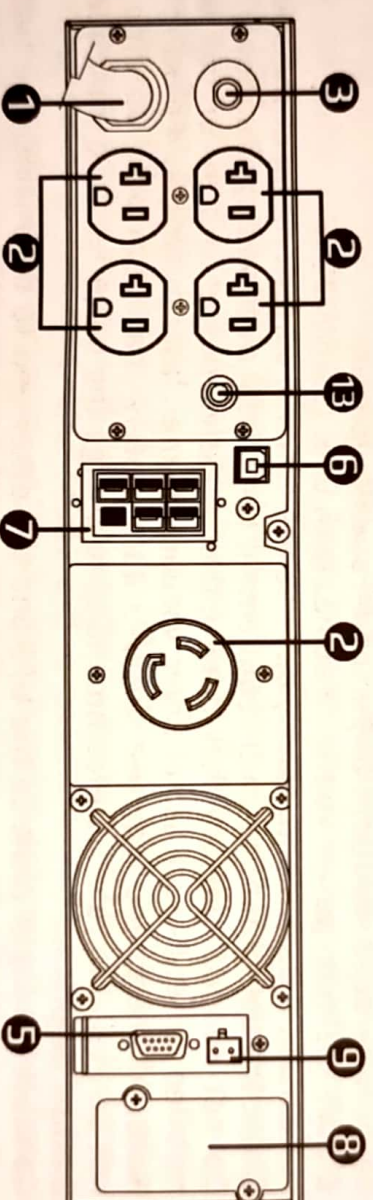
■ **USER MANUAL** ■



IEC Type



Schuko Type



NEMA Type

- 1 Input
- 2 Outlet
- 3 Input breaker
- 4 Network transient protector
- 5 RS232 port
- 6 USB (optional)
- 7 External battery port (optional)

- 8 Interface port (optional)
- 9 EPO (optional)
- 10 Maintenance switch (optional)
- 11 Terminal block
- 12 Reset
- 13 Outlet breaker

\*Figures only display available function; functions are not on unit if not marked.

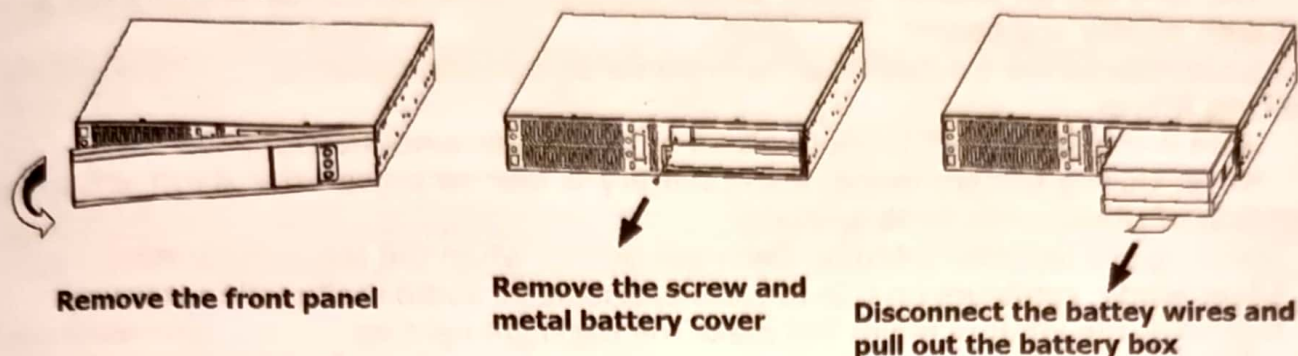


## 6.4 Battery

### 6.4.1 Maintenance

The reliability of the battery is heavily related to the environmental issue. At the temperature of 25 degrees Celsius, a regular 6-12 months' check-up is advised.

### 6.4.2 Replacement



1. Hold the **display-side** front panel corner; Pull out the other side lightly as arrow indicated. Then, push to the side to unlock the other tenon.
2. Remove the battery cover, disconnect battery cable, then remove the battery.
3. Replace with the same type and quantity of battery,
4. Reinstall the new battery and push it into the UPS.
5. Reinstall the battery cover. Reinstall the front panel.

**Note:** Tower model battery replacements are not available by users. Please contact for technical assistance.

### 6.4.3 External battery pack

The following chart is the recommended specification of the external battery pack/cabinet. For other options, please ensure that the option meets safety instruction and local legislation.

**Note:** when power supplies by external batteries, output loads will be limited to 90% for overall power generation.

Model		1000	1500(Rack)	1500(Tower)	2000	3000
Battery Type		12V 7A				12V 9A (option) 12V 7A
Number of Batteries		6		8	12	12
Back-up time /Full load (min) (Battery Pack Only)		Approx. 13-15		Approx. 13-15		Approx. 10-13
Typical Recharge time		<8 hrs to 90%				
Dimensions WxDxH (mm)	Tower type	144x357x228	--	191 x 406 x 324		
	Rack Type	428 x 425 x 84		--	428 x 635 x 84	
Net Weight (kgs)	Tower type	18.0	--	24.5	33.4	37.0 (9AH battery)
	Rack Type	20.7		--	37.3	40.8 (9AH battery)

### Maintenance Bypass Procedure

#### Maintenance

1. Press the "ON/OFF" button to turn on UPS. It will operate in "Line-Mode."
2. Press the "Function" button for 3 seconds and toggle to "Manual Bypass."
3. Press "Enter" to select. You will see the default setting "OFF" displayed in LCD.
4. Use the "Function" button again to set Bypass on "ON" and press "Enter" again. UPS will go on "Manual Bypass Mode" with display indication.

#### Restore

1. Check the UPS display; it should show "Manual Bypass Mode" with indications
2. Press the "Function" button for 3 seconds and toggle to "Manual Bypass."
3. Press "Enter" to select. You will see the setting as "ON" displayed in LCD.
4. Use the "Function" button again to set Bypass on "OFF" and press "Enter" again. UPS will return to Line-Mode.



## APP-B Technical Specifications

### For all model

- \* While 208V output, capacity will be derated to 90%.
- \* While 100V input, capacity will be derated to 80% for 1.5K/2K/3K LV model.
- \* While 110V input, capacity will be derated to 90% for 1.5K/2K/3K LV model.
- \*\* Specifications are subject to change without further notice.
- \*\* Specifications are for reference; actual information based on the real product.

Tower Model		1000-L	1500-L	2000-L	3000-L
Configuration					
Capacity (VA / Watts)		1000 VA / 1000 W	1500 VA / 1500 W	2000 VA / 2000 W	3000 VA / 3000 W
Form		Tower Type			
Phase		Single Phase			
Energy Saving		Yes - ECO Mode Efficiency >94%			
Input					
Voltage (Normal)		100* / 110* / 120 / 127 or 208 / 220 / 230 / 240 VAC			
Input Voltage Range		60 - 144 VAC, < 25% Load	120 - 276 VAC, < 25% Load		
		70 - 144 VAC, < 50% Load	140 - 276 VAC, < 50% Load		
		80 - 144 VAC, < 75% Load	160 - 276 VAC, < 75% Load		
		90 - 144 VAC, < 100% Load	180 - 276 VAC, < 100% Load		
Input Frequency Range		50 / 60 Hz (Auto Sensing)			
Input Power Factor		>0.97			
Cold Start		Yes			
Output					
Rated Power Factor		1.0			
Waveform		Pure Sine Wave			
Voltage		100 / 110 / 115 / 120 / 127 VAC ± 2% or 208* / 220 / 230 / 240 VAC ± 2%			
Frequency		50 / 60 Hz ±0.25 Hz			
Transfer Time		0 ms			
Harmonic Distortion		≤ 2.5% THD at Linear Load			
Crest Factor		3 : 1			
EPO Function		Option			
Protection					
Overload	Line Mode	105% - 120% for 30 seconds / 121% - 150% for 10 seconds			
	Battery Mode	101% - 109% for 10 seconds / 110% - 120% for 3 seconds			
Surge Protection		IEC 61000-4-5 Level 3			
Bypass		Internal Bypass (Automatic and Manual)			
Short Circuit Protection		UPS Output Cut Off Immediately			
Charger					
UPS		1A			
UPS Build In		5A			
Total		6A			
Battery					
Voltage		24V	48V	72V	72V
Sealed, Maintenance Free		Yes			
Typical Recharge Time		Depends on battery qunantity			
External Battery Module		Option			
External Battery Connector		Option			
Management & Communication					
Indicator		LCD Control Panel			
Communication Port		RS 232, USB B type			
Mini Slot		Option			
Audible Alarms		Yes			
Physical					
Dimensions (WxDxH) (mm)		144 x 357 x 228	191 x 406 x 327		
Weight (kgs)		8.6	10.7		
Shipping Dimensions (mm)		249 x 448 x 359	292 x 500 x 455		
Shipping Weight (kgs)		9.7	17.7		