

Back Panel for all models



650VA Tower



1K-1.5K-2K Tower



1K-1.5K / 1U Rack



1K-1.5K-2K / 2U Rack



3K / 3U Rack & Tower Convertible



5K / 3U Rack & Tower Convertible



7.5K-10K / 3U Rack & Tower Convertible

★ Outlets layout and quantities for IEC and NEMA models are the same.

Functions



Rack & Tower Convertible

Super compact and special layout design enable Rack & Tower Convertible for both space saving and rack applicability.



Easy Swap Battery Replacement

User-Friendly design for Easy swappable battery replacement allow users to replace the batteries simply from the front panel.

Options



Emergency Power Off (EPO)

It is available for APA rack series (1U, 2U and 3U).



Multiple interfaces Cards

With a Multi-interface slot and an additional Multi-interface card, various communications combinations are selectable. Including RS232, SNMP, RS485, AS-400, Modbus, UBS, Dry Contact and customized interface. All interfaces enable at the same time.



Soltec
The professional power people

APA-Series

Line-interactive 650VA-10kVA



Features

- True Bi-lateral Converter Line-interactive UPS
- Pure sine wave for both Linear & non-linear loads
- Complete range from 650VA to 10KVA
- Various models for Tower, Rack 1U/2U, Tower & Rack Convertible
- Standard and long backup time models available
- Multi-interface slot for RS232, SNMP, RS485, Modbus, USB, Dry Contact and customized interfaces
- Multi-interface card provides extra communication ports for RS232, USB and Dry Contact
- Various communications combinations. All communication interfaces enable at the same time
- Complete protections for overload, overheat, surges, spikes, short circuit, over charge and fool-proof wiring installation
- Real time Remain Backup time calculation
- User-friendly Easy swap battery replacement design
- Built-in powerful charger with input power factor correction
- Emergency Power Off (EPO) available
- Intelligent fan speed control
- DC start. Integrate with Genset

APA Series 650VA-10kVA

True Line-interactive Sine Wave UPS

Specification

MODEL	APA-650 LED	APA-103T	APA-153T	APA-203T	APA-103U	APA-153U	APA-103TR	APA-153TR	APA-203TR	APA-303TR	APA-503TR	APA-753TR	APA-104TR	APA-103TL	APA-153TL	APA-203TL	APA-103TRL	APA-153TRL	APA-203TRL	APA-303TRL	APA-503TRL	APA-753TRL		
Capacity	VA / Watt	650VA/406W	1kVA/625W	1.5kVA/938W	2kVA/1250W	1kVA/625W	1.5kVA/938W	1kVA/625W	1.5kVA/938W	2kVA/1250W	3kVA/1875W	5kVA/3125W	7.5kVA/4688W	10kVA/6250W	1kVA/625W	1.5kVA/938W	2kVA/1250W	1kVA/625W	1.5kVA/938W	2kVA/1250W	3kVA/1875W	5kVA/3125W	7.5kVA/4688W	
Mode Type		Tower				Rack				Tower & Rack convertible				Tower				Tower & Rack convertible						
INPUT																								
Nominal Voltage		110/115/120 Vac or 220/230/240Vac										220/230/240Vac		110/115/120 Vac or 220/230/240Vac										220/230/240Vac
Voltage Range	Acceptable Voltage Range	85Vac ~ 150Vac or 170Vac ~ 300Vac										170Vac ~ 300Vac		85Vac ~ 150Vac or 170Vac ~ 300Vac										170Vac ~ 300Vac
	Frequency	45Hz ~ 70Hz Auto-sensing																						
	Boost Transfer	97.8Vac ± 2% ; 195.5Vac ± 2%										195.5Vac ± 2%		97.8Vac ± 2% ; 195.5Vac ± 2%										195.5Vac ± 2%
	Boost Return	102.8Vac ± 2% ; 205.5Vac ± 2%										205.5Vac ± 2%		102.8Vac ± 2% ; 205.5Vac ± 2%										205.5Vac ± 2%
	Buck Transfer	132Vac ± 2% ; 264.5Vac ± 2%										264.5Vac ± 2%		132Vac ± 2% ; 264.5Vac ± 2%										264.5Vac ± 2%
	Buck Return	127Vac ± 2% ; 254.5Vac ± 2%										254.5Vac ± 2%		127Vac ± 2% ; 254.5Vac ± 2%										254.5Vac ± 2%
	Low Voltage Transfer	85Vac ± 2% ; 170Vac ± 2%										170Vac ± 2%		85Vac ± 2% ; 170Vac ± 2%										170Vac ± 2%
	Low Voltage Return	90Vac ± 2% ; 180Vac ± 2%										180Vac ± 2%		90Vac ± 2% ; 180Vac ± 2%										180Vac ± 2%
	High Voltage Transfer	150Vac ± 2% ; 300Vac ± 2%										300Vac ± 2%		150Vac ± 2% ; 300Vac ± 2%										300Vac ± 2%
	High Voltage Return	145Vac ± 2% ; 290Vac ± 2%										290Vac ± 2%		145Vac ± 2% ; 290Vac ± 2%										290Vac ± 2%
OUTPUT																								
Voltage		110/115/120Vac or 220/230/240Vac re-settable via LCD panel ± 15%																						
Regulation	Line Mode																							
Regulation	Battery Mode	< 3% RMS for entire battery voltage range																						
Frequency	Line Mode	Synchronize to AC main																						
Regulation	Battery Mode	50Hz or 60Hz ± 0.1Hz																						
Power Factor		0.625																						
Wave Form		Pure sine wave																						
Efficiency		> 80%																						
Overload	Line Mode	> 110%, then buzzer alarm and amber LED blink continuously																						
Protection	Battery Mode	110%~150% : 30 sec, >150% : 200ms, then UPS shutdown																						
Short Circuit	Line Mode	Circuit breaker																						
Protection	Battery Mode	Electronic circuit																						
DC START																								
Cold Start		Yes																						
TRANSFER TIME																								
Typical		< 4 ms																						
BATTERY																								
Voltage		12Vdc	24Vdc	36Vdc	36Vdc	24Vdc	24Vdc	36Vdc	36Vdc	36Vdc	48Vdc	48Vdc		24Vdc	36Vdc	24Vdc	36Vdc	36Vdc	36Vdc	36Vdc	48Vdc			
Type		9AH	7AH	7AH	9AH	7AH	7AH	9AH	9AH	7AH	9AH	7AH	9AH											
Quantity		1pce	2pcs	3pcs	3pcs	4pcs	2pcs	3pcs	3pcs	6pcs	8pcs	16pcs	16pcs											
Backup Time		> 2min	> 3 min		> 3 min			> 3 min						> 3 min		> 8A		Based on Load % & Batteries		> 10A				
Recharging Current		0.1C	0.1C ~ 0.3C																					
CONTROL PANEL																								
LCD Display		UPS status, IP&O/P Voltage/Frequency, Load level, Battery voltage & level, Temperature, Model																						
LED		Normal(Green), Warning (Amber), Fault (Red)																						
AUDIBLE ALARM																								
Battery Mode		Beeping every 4 seconds																						
Low Battery		Beeping every second																						
UPS Fault		Beeping continuously																						
Overload		Beeping twice per second																						
COMMUNICATION INTERFACES																								
Standard	USB	RS232																						
Multi-Interfaces Card(Optional)	N/A	Various Comb. of RS232, SNMP, USB, Dry Contact, AS400, Enable at the same time																						
ENVIRONMENT																								
Operation Temperature		0 - 40 °C (32 - 104 °F)																						
Relative Humidity		0-95% (non-condensing)																						
Audible Noise(At 1M)		< 55dBA																						
PHYSICAL																								
Dimensions(W*H*D)mm		115*322*130	145*215*365	145*215*431		440*44*515		440*88*465			440*132*465	440*132*620	440*132*465		145*215*365	145*215*431		440*88*465		440*132*465				
Net Weight (Kg) w/o battery		3.2	8.6	10.4	12.2	12	14.1	15.6	17.1	17.5	22.8	29.4	31.4	36.4	11.6	12.6	13	14	16.4	21	25.5	31.4	36.4	
NEMA Outlets (110/115/120Vac)		3	4	6	4	4			8	8+1* terminal block	4+1*terminal block		3	6	6	10	8	4+1*terminal block	4+1*terminal block					
IEC Outlets (220/230/240Vac)		4	3	6	5	6			10	10+1* terminal block	5+1*terminal block		3	6	6	10	10	5+1*terminal block	5+1*terminal block					

* Rack Battery Bank APA BTR16 for 16 pcs 12V/7Ah or 16pcs 12V/9Ah.Dimension:W*H*D=440*132*465mm

* 7.5-10kVA connect to an external battery bank

* All specifications mentioned above are subject to change without prior notice



SOLTEC POWER CO., LTD
 No.37,Yunke Road,Sec.3,Douliu City,Yunlin,Taiwan
 Tel:+886-5-551-1017 Fax:+886-5-551-0027
<http://www.soltec.com.tw> E-mail: soltec@soltec.com.tw
sales@soltec.com.tw

