FSP User Manual

Champ 1K/2K/3K Online UPS

Tower/ Rack Mount

onduleur shop

Uninterruptible Power Supply System

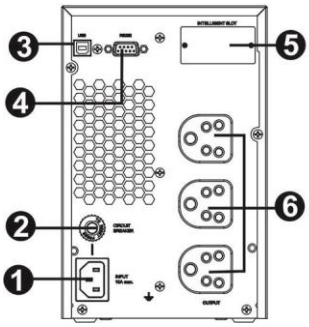
Version: 1.6

2. Installation and setup

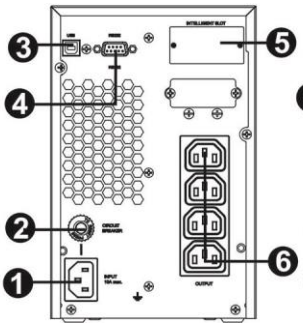
NOTE: Before installation, please inspect the unit. Be sure that nothing inside the package is damaged. Please keep the original package in a safe place for future use.

2-1. Rear panel view

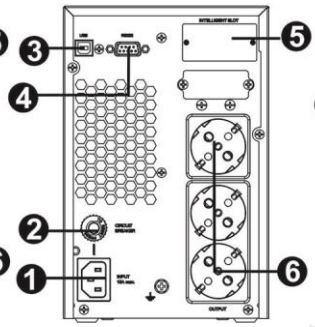
1K



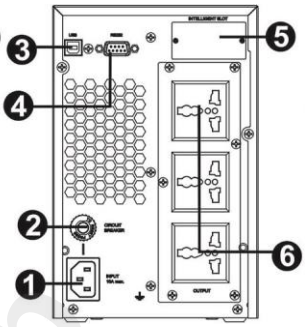
India Type



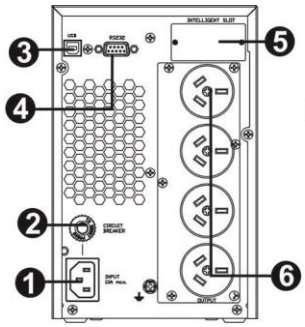
IEC Type



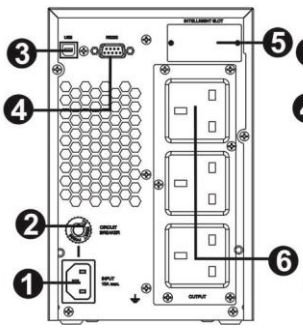
Schuko Type



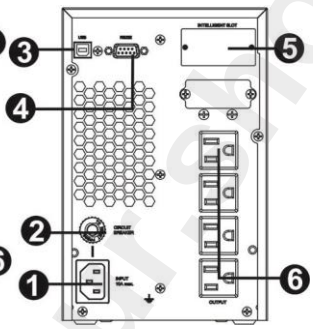
Universal Type



Argentina Type

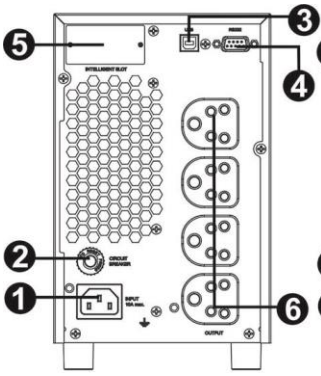


UK Type

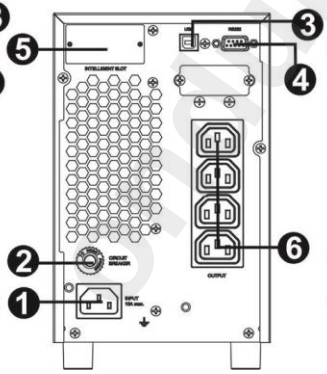


NEMA Type

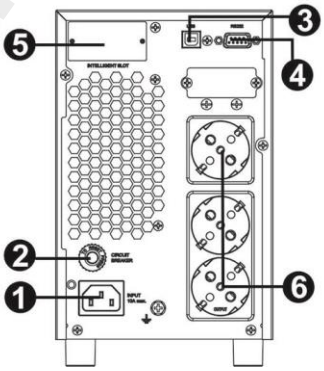
2K



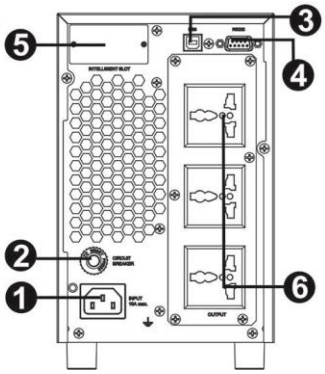
India Type



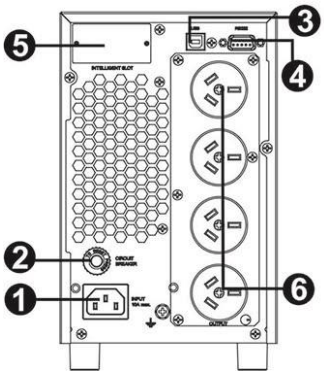
IEC Type



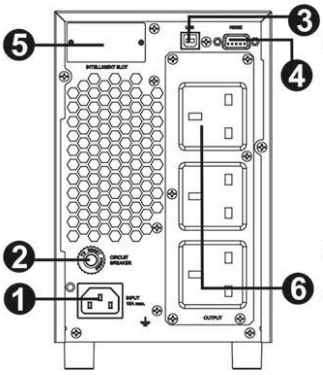
Schuko Type



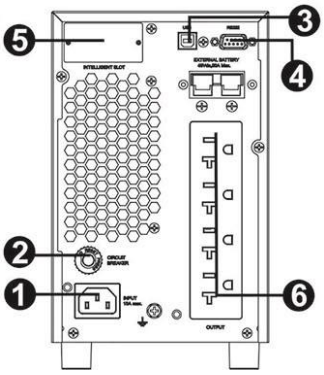
Universal Type



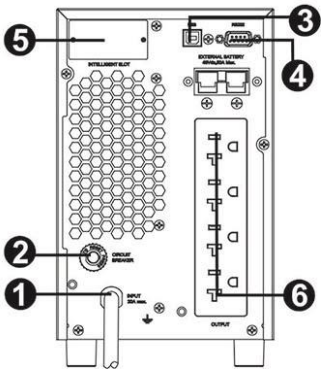
Argentina Type



UK Type



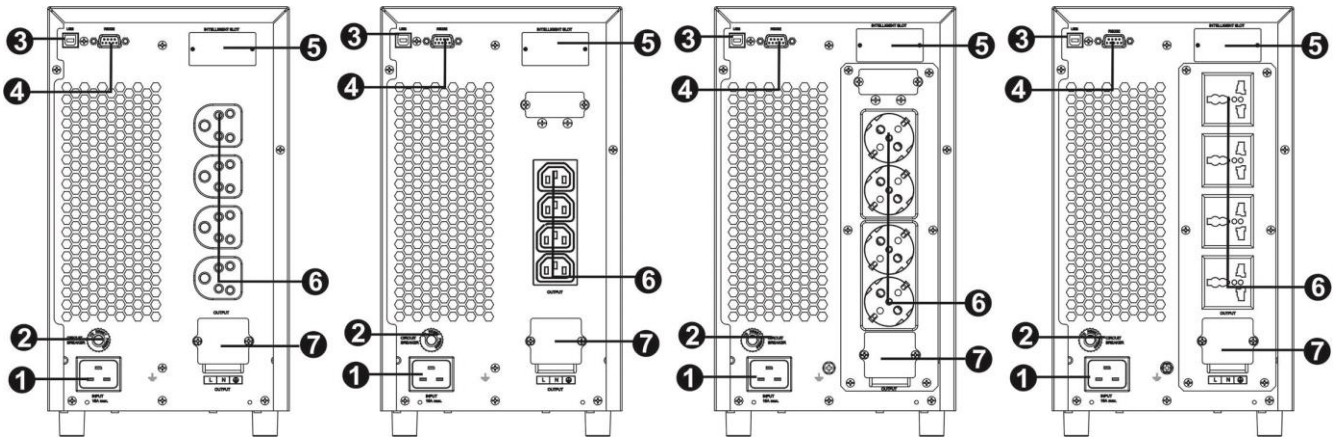
NEMA Type I



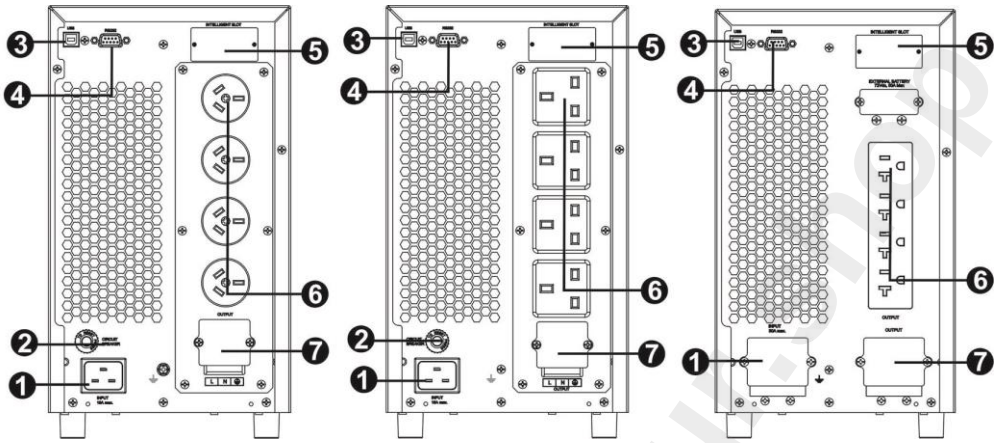
NEMA Type II

Simulated sample

3K

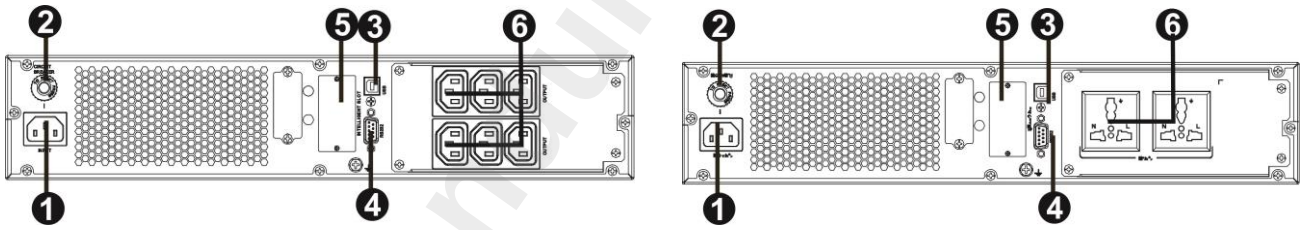


India Type **IEC Type** **Schuko Type** **Universal Type**

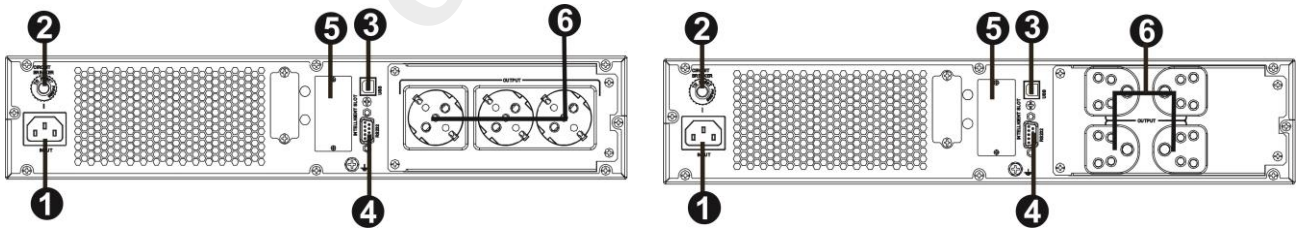


Argentina Type **UK Type** **NEMA Type**

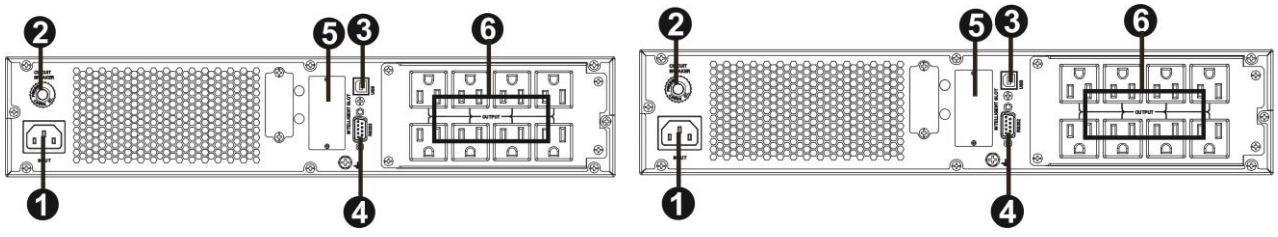
1KR



IEC Type **Universal Type**

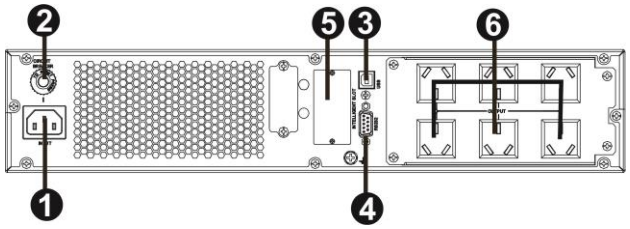


Schuko Type **India Type**



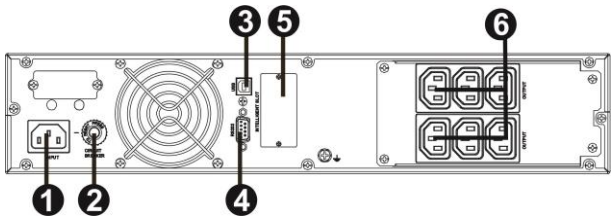
NEMA Type **NEMA Type**

onlineups.com

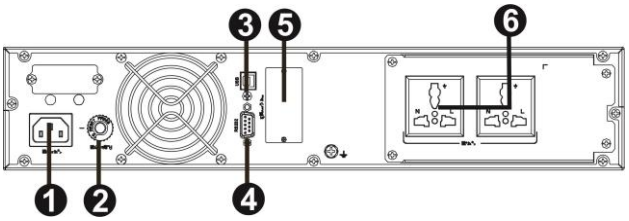


Argentina Type

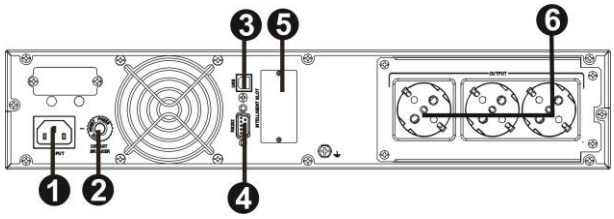
2KR



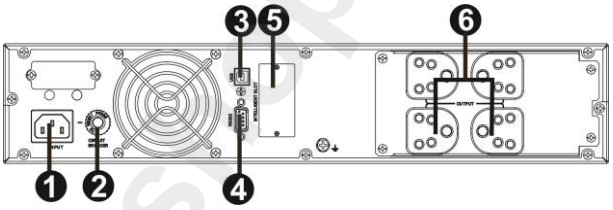
IEC Type



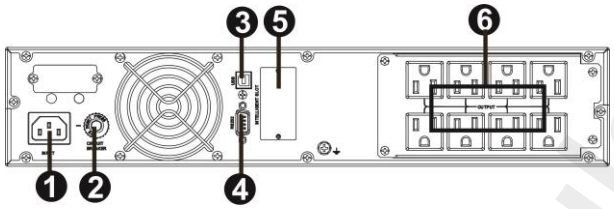
Universal Type



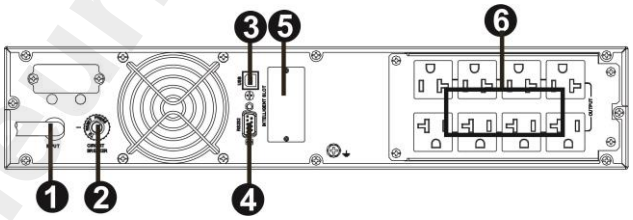
Schuko Type



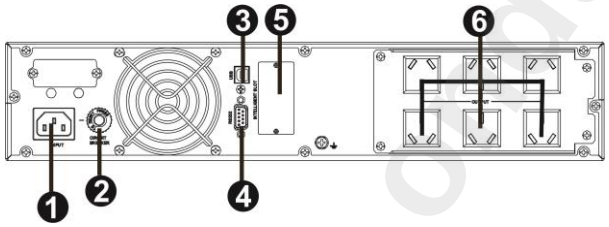
India Type



NEMA Type

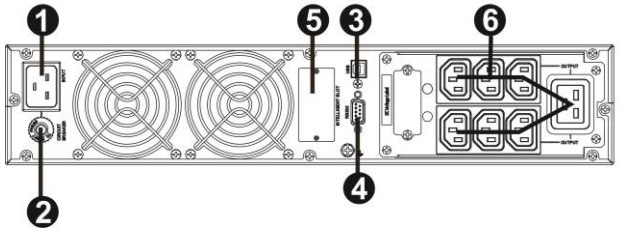


NEMA Type

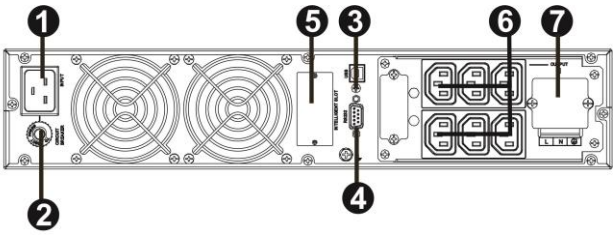


Argentina Type

3KR

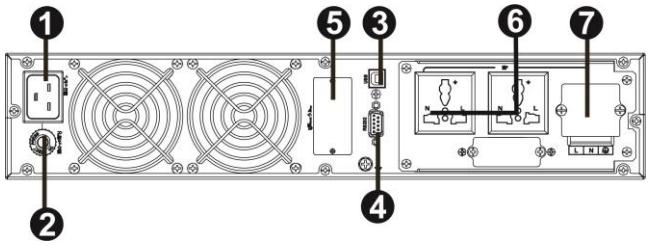


IEC Type

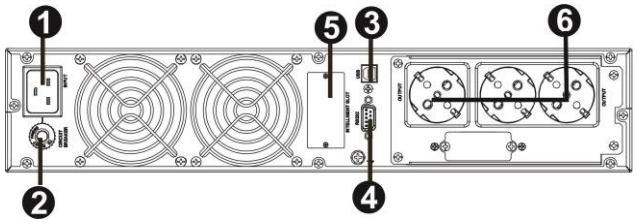


IEC Type

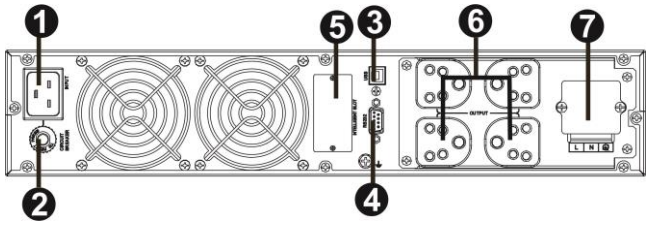
oduleur.shop



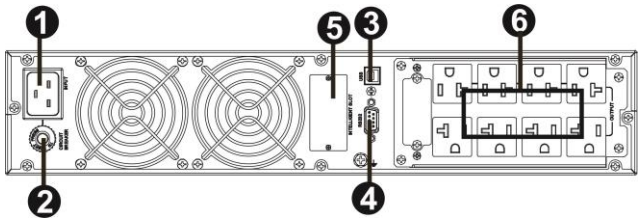
Universal Type



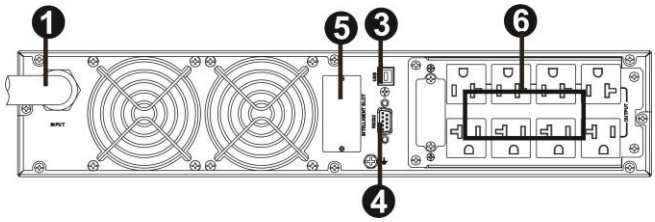
Schuko Type



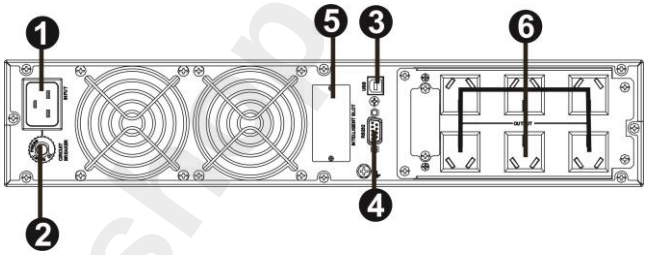
India Type



NEMA Type



NEMA Type

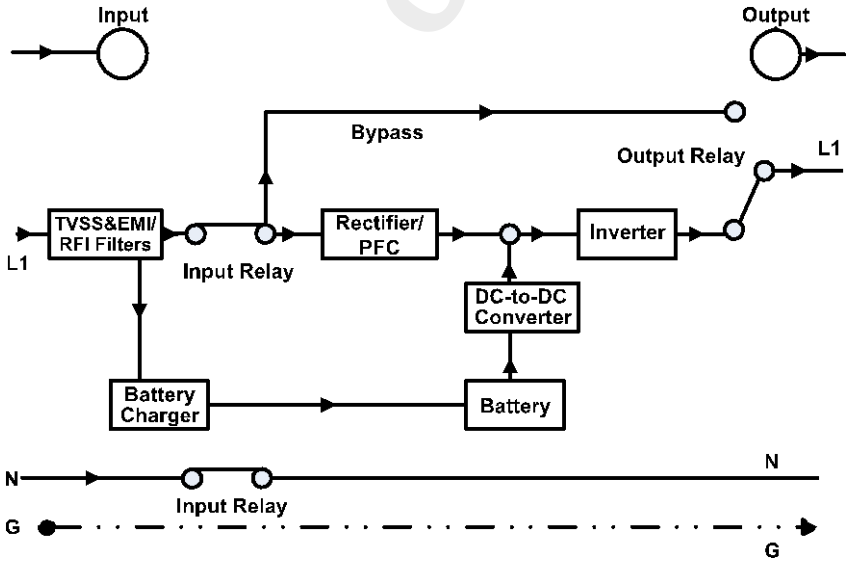


Argentina Type

1. AC input
2. Input circuit breaker
3. USB communication port
4. RS-232 communication port
5. SNMP intelligent slot (option)
6. Output receptacles
7. Output terminal

2-2. Operating principle

The operating principle of the UPS is shown as below



onduleur.shop

6. Specifications

MODEL		Champ 1K		Champ 2K		Champ 3K	
CAPACITY*		1000 VA / 900 W		2000 VA / 1800 W		3000 VA / 2700 W	
INPUT							
Voltage Range	Low Line Transfer	90Vac/80Vac/70Vac/60Vac±5% or 180Vac/160Vac/140Vac/120Vac±5% (Ambient Temp.<35^{0}C) (based on load percentage 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0)					
	Low Line Comeback	100Vac/90Vac/80Vac/70Vac or 195Vac/175Vac/155Vac/135Vac ± 5 % (Ambient Temp.<35^{0}C) (based on load percentage 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0)					
	High Line Transfer	145 Vac ± 5 % or 300 Vac ± 5 %					
	High Line Comeback	140 Vac ± 5 % or 290 Vac ± 5 %					
Frequency Range		40Hz ~ 70 Hz					
Phase		Single phase with ground					
Power Factor		≧ 0.99 @ nominal voltage (input voltage)					
OUTPUT							
Output voltage		110/115/120/127Vac or 208/220/230/240Vac					
AC Voltage Regulation		±1% (Batt. Mode)					
Frequency Range		47 ~ 53 Hz or 57 ~ 63 Hz (Synchronized Range)					
Frequency Range (Batt. Mode)		50 Hz ± 0.5% or 60Hz ± 0.5%					
Overload		Ambient Temp.<35^{0}C 105%~110%: UPS shuts down after 10 minutes at battery mode or transfer to bypass when the utility is normal 110%~130%: UPS shuts down after 1minute at battery mode or transfer to bypass when the utility is normal >130%:UPS shuts down after 3 seconds at battery mode or transfer to bypass when the utility is normal					
Current Crest Ratio		3:1					
Harmonic Distortion		≦ 3 % THD (linear load); ≦ 6 % THD (non-linear load)					
Transfer Time	AC Mode to Batt. Mode	Zero					
	Inverter to Bypass	4 ms (Typical)					
Waveform (Batt. Mode)		Pure Sinewave					
EFFICIENCY							
AC Mode		88%		89%		90%	
Battery Mode		83%		87%		88%	
BATTERY							
Standard Model	Battery Type	12 V / 9 Ah		12 V / 9 Ah		12 V / 9 Ah	
	Numbers	2		4		6	
	Recharge Time	4 hours recover to 90% capacity (Typical)					
	Charging Current	1.0 A (max.)					
	Charging Voltage	27.4 Vdc ± 1%		54.7 Vdc ±1%		82.1 Vdc ±1%	
Long-run Model*	Battery Numbers	2	3	4	6	6	8
	Charging Current	1.0A/2.0A/4.0A/6.0 A					
	Charging Voltage	27.4 Vdc ± 1%	41.0Vdc ± 1%	54.7 Vdc ±1%	82.1Vdc ±1%	82.1 Vdc ±1%	109.4Vdc ±1%
PHYSICAL							
Standard Model	Dimension, D X W X H	282 X 145 X 220 (mm)		397 X 145 X 220 (mm)		421 X 190 X 318 (mm)	
	Net Weight (kgs)	9.8		17.0		27.6	
Long-run Model*	Dimension, D X W X H	282 x 145 x 220 (mm)		397x 145 x 220(mm)			
	Net Weight (kgs)	4.1	4.1	6.8	6.8	7.4	7.4
ENVIRONMENT							
Operation Humidity		20-90 % RH @ 0- 40°C (non-condensing)					
Noise Level		Less than 50dBA @ 1 Meter					
MANAGEMENT							
Smart RS-232 or USB		Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux, Unix and MAC					
Optional SNMP		Power management from SNMP manager and web browser					

*Long-run model is only available in 208/220/230/240VAC systems, PF will be adjust to 0.8

** Derate capacity to 80% of capacity in Frequency converter mode or when the output voltage is adjusted to 208VAC.

*** Product specifications are subject to change without further notice.

onduleur-sms

MODEL		**Champ Rack 1K**	**Champ Rack 2K**	**Champ Rack 3K**
CAPACITY*		1000 VA / 900 W	2000 VA / 1800 W	3000 VA / 2700 W
INPUT				
Voltage Range	Low Line Transfer	90Vac/80Vac/70Vac/60Vac±5% or 180Vac/160Vac/140Vac/120Vac±5% (Ambient Temp.<35^{0}C) (based on load percentage 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0)		
	Low Line Comeback	100Vac/90Vac/80Vac/70Vac or195Vac/175Vac/155Vac/135Vac ± 5 % (Ambient Temp.<35^{0}C) (based on load percentage 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0)		
	High Line Transfer	145 Vac ± 5 % or 300 Vac ± 5 %		
	High Line Comeback	140 Vac ± 5 % or 290 Vac ± 5 %		
Frequency Range		40Hz ~ 70 Hz		
Phase		Single phase with ground		
Power Factor		≧ 0.99 @ nominal voltage (input voltage)		
OUTPUT				
Output voltage		110/115/120/127Vac or 208/220/230/240Vac		
AC Voltage Regulation		±1% (Batt. Mode)		
Frequency Range		47 ~ 53 Hz or 57 ~ 63 Hz (Synchronized Range)		
Frequency Range (Batt. Mode)		50 Hz ± 0.5% or 60Hz ± 0.5%		
Overload		Ambient Temp.<35^{0}C 105%~110%: UPS shuts down after 10 minutes at battery mode or transfer to bypass when the utility is normal 110%~130%: UPS shuts down after 1minute at battery mode or transfer to bypass when the utility is normal >130%:UPS shuts down after 3 seconds at battery mode or transfer to bypass when the utility is normal		
Current Crest Ratio		3:1		
Harmonic Distortion		≦ 3 % THD (linear load); ≦ 6 % THD (non-linear load)		
Transfer Time	AC Mode to Batt. Mode	Zero		
	Inverter to Bypass	4 ms (Typical)		
Waveform (Batt. Mode)		Pure Sinewave		
EFFICIENCY				
AC Mode		88%	89%	90%
Battery Mode		83%	87%	88%
BATTERY				
Battery Type		12 V / 9 Ah	12 V / 9 Ah	12 V / 9 Ah
Numbers		2	4	6
Recharge Time		4 hours recover to 90% capacity (Typical)		
Charging Current		1.0 A (max.)		
Charging Voltage		27.4 Vdc ± 1%	54.7 Vdc ±1%	82.1 Vdc ±1%
PHYSICAL				
Dimension, D X W X H		310 x 438 x 88 mm	410 x 438 x 88 mm	630 x 438 x 88
Net Weight (kgs)		12	19	29.3
ENVIRONMENT				
Operation Humidity		20-90 % RH @ 0- 40°C (non-condensing)		
Noise Level		Less than 50dBA @ 1 Meter		
MANAGEMENT				
Smart RS-232 or USB		Supports Windows® 2000/2003/XP/Vista/2008/7/8, Linux, Unix and MAC		
Optional SNMP		Power management from SNMP manager and web browser		

* Derate capacity to 80% of capacity in Frequency converter mode or when the output voltage is adjusted to 208Vac.

** Product specifications are subject to change without further notice.

Onduleur.com