

CHAMP SERIES



PF0.9 Online UPS

1KVA-10KVA

Applications:



ECO mode



Pure sinewave



Generator compatible



Computer

Compact & Small-Scale Online UPS Solutions

Champ Series is the high power density double-conversion online UPS with a output power factor 0.9. It's designed in small cabinet with microprocessor controller.

Champ Series also have USB and RS-232 communication ports as standard, with a built-in intelligent slot for additional adapters, protocol converters and relate contact cards.

GENERAL FEATURES

True double-conversion

Microprocessor control optimizes reliability

Input power factor correction ≥ 0.99

Output power factor 0.9

Wide input voltage (130 V – 280 V)

Converter mode available

ECO mode for energy saving only available for 1-3 K models

Generator compatible

Smart SNMP works well with either USB or RS-232

together display allows easy monitoring and access of UPS status

Adjustable battery numbers only available for 6 K/10 K models



TECHNICAL SPECIFICATIONS

MODEL	Champ 1K T	Champ 2K T	Champ 3K T	Champ 6KL T	Champ 10KL T
PHASE	Single phase with ground				
CAPACITY	1000 VA / 900W	2000 VA / 1800W	3000 VA / 2700 W	6000 VA / 5400 W	10000 VA / 9000 W
INPUT					
Nominal Voltage	200/208/220/230/240 VAC			208/220/230/240 VAC	
Voltage Range	120-300 VAC (Based on load at 50%) 180-280 VAC (Based on load at 100%)			110-300 VAC (Based on load at 50%) 176-300 VAC (Based on load at 100%)	
Frequency Range	40Hz ~ 70 Hz			46~54 Hz or 56~64 Hz	
Power Factor	≥ 0.99 @ Nominal Voltage (100% Last)				
OUTPUT					
Nominal Voltage	208/220/230/240 VAC			208/220/230/240 VAC	
AC Voltage Regulation	± 1%			± 1%	
Frequency Range(Synchronized Range)	47~ 53 Hz or 57 ~ 63 Hz			46~54 Hz or 56~64 Hz	
Frequency Range(Batt. Mode)	50 Hz or 60 Hz ± 0.5%			50 Hz or 60Hz ± 0.1 Hz	
Current Crest Ratio	3:1			3:1	
Harmonic Distortion	≤ 3 % THD (Linear Load), ≤ 6 % THD (Non-linear Load)			≤ 3 % THD (Linear Load), ≤ 5 % THD (Non-linear Load)	
Transfer Time	AC mode to Battery mode	Zero			Zero
	Inverter to Bypass	4 ms (Typical)			Zero
Waveform (Batt. Mode)	Pure Sinewave				
EFFICIENCY					
Line Mode	88%	89%	90%	92%	93%
Battery Mode	83%	85%	88%	90%	91%
BATTERY					
Battery Type	12V / 9 Ah	12V / 9 Ah	12 V / 9 AH	Depends on application	
Numbers	2	4	6	16 - 20pcs(Adjustable)	
Typical Recharge Time	4 hours recover to 90% capacity			NA	
Charging Current (max.)	1.0 A	1.0 A	1.0 A	1A, 2A, 4A, 6A (Adjustable,6A only for 16pcs batteries)	
Charging Voltage	27.4 VDC ± 1%	54.7 VDC ± 1%	82.1 VDC ± 1%	218.4V±1%(based on 16pcs batteries)	
INDICATORS					
LCD Display	Last level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators				
ALARM					
Battery Mode	Sounding every 4 seconds				
Low Battery	Sounding every second				
Overload	Sounding twice every second				
Fault	Continuously sounding				
AC INPUT & OUTPUT CONNECTORS					
AC Input Connector	1 x IEC 320 C14	1 x IEC 320 C14	1 x IEC 320 C20	Terminal block	
AC Output Connector	3 x CEE 7/4 (Schuko)	3 x CEE 7/4 (Schuko)	4 x CEE 7/4 (Schuko)		
STANDARDS					
Safety / EMC	IEC 62040-1 (safety) / IEC-62040-2 (EMC) / CE				
PHYSICAL					
Dimension, D x W x H(mm)	282 x 145 x 220	397 x 145 x 220	421 x 190 x 318	UPS Unit: 369 x 190 x 318 Battery Pack: 369 x 190 x 318	UPS Unit: 442 x 190 x 318 Battery Pack: 442 x 190 x 318
Net Weight (kgs)	9.8	17.0	27.6	UPS Unit: 12 Battery Pack:49	UPS Unit: 16 Battery Pack:49.5
ENVIRONMENT					
Operation Humidity	20-90% RH @ 0-40°C (non-condensing)			0-95% RH @ 0-50°C (non-condensing)	0-95% RH @ 0-40°C (non-condensing)
Noise Level	Less than 50 dBA @ 1 Meter			Less than 50 dBA @ 1 Meter	Less than 58 dBA @ 1 Meter
MANAGEMENT					
Smart RS-232 / USB	Supports Windows 2000/2003/XP/Vista/2008/7, Linux and MAC				
Optional SNMP	Power management from SNMP manager and web browser				

*1-3KVA: Derate to 80% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 100/200/208VAC.
6-10KVA: Derate to 60% of capacity in Frequency converter mode and to 90% when the output voltage is adjusted to 208VAC.
Product specifications are subject to change without further notice.



Backup Time Table for Champ Series

Battery Bank	Backup Time with Load (Min)			
	25%	50%	75%	100 %
Champ 1K T/R Internal battery only (24V/12V-9Ah x 2)	20	9.0	5.0	3.0
Champ 2K T/R Internal battery only (48V/12V-9Ah x 4)	25	10	6.0	3.0
Champ 3K T/R Internal battery only (72V/12V-9Ah x 6)	26	10	6.0	3.0
Champ 6KL T/R +1 external battery (192/12V-9Ahx16)	36	15	10	6
	86	38	25	17
Champ 10KL T/R +1 external battery (192/12V-9Ahx16)	18	8	4	3
	44	19	13	8

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PHASE	Single phase with ground				
CAPACITY	1000 VA / 900W	2000 VA / 1800W	3000 VA / 2700 W	6000 VA / 5400 W	10000 VA / 9000 W
INPUT					
Nominal Voltage	200/208/220/230/240VAC		208/220/230/240VAC		
Voltage Range	120-300 VAC at 50% load 180-300 VAC at 100% load		110-300 VAC ± 3% at 50% Load 176-300 VAC ± 3% at 100% Load		
Frequency Range	40Hz ~ 70 Hz		46~54 Hz or 56~64 Hz		
Power Factor	≥ 0.99 @ Nominal Voltage (100% Last)				
OUTPUT					
Nominal Voltage	200/208/220/230/240VAC		208/220/230/240 VAC		
AC Voltage Regulation	± 1%		± 1%		
Frequency Range(Synchronized Range)	47~ 53 Hz or 57 ~ 63 Hz		46~54 Hz or 56~64 Hz		
Frequency Range(Batt. Mode)	50 Hz ± 0.25 Hz or 60Hz ± 0.3 Hz		50 Hz or 60Hz ± 0.1 Hz		
Current Crest Ratio	3:1		3:1		
Harmonic Distortion	≤ 3 % THD (Linear Load), ≤ 6 % THD (Non-linear Load)		≤ 3 % THD (Linear Load), ≤ 5 % THD (Non-linear Load)		
Transfer Time	AC mode to Battery mode	Zero		Zero	
	Inverter to Bypass	4 ms (Typical)		Zero	
Waveform (Batt. Mode)	Pure Sinewave				
EFFICIENCY					
Line Mode	88%	89%	90%	92%	93%
Battery Mode	83%	87%	88%	90%	91%
BATTERY					
Standard Model	Battery Type	12V / 9 Ah	12V / 9 Ah	12 V / 9 AH	
	Numbers	2	4	6	
	Typical Recharge Time	4 hours recover to 90% capacity			
	Charging Current (max.)	1.0 A	1.0 A	1.0 A	
Long-run Model	Charging Voltage	27.4 VDC ± 1%	54.7 VDC ± 1%	82.1 VDC ± 1%	
	Battery Type	Depending on the capacity of external batteries			
	Numbers in string	16-20pcs (Adjustable)			
	Charging Current (max.)	N/A		1A/2A/4A/6A (Adjustable, 6A is only available for 16pcs batteries)	
Charging Voltage	218.4 VDC ± 1% (Based on 16pcs batteries)				
INDICATORS					
LCD Display	Last level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators				
ALARM					
Battery Mode	Sounding every 4 seconds				
Low Battery	Sounding every second				
Overload	Sounding twice every second				
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AC INPUT & OUTPUT CONNECTORS					
AC Input Connector	1 x IEC 320 C14	1 x IEC 320 C14	1 x IEC 320 C20	Terminal block	
AC Output Connector	3 x CEE 7/4 (Schuko)	3 x CEE 7/4 (Schuko)	4 x CEE 7/4 (Schuko)	Terminal block	
STANDARDS					
Safety / EMC	IEC 62040-1 (safety) / IEC-62040-2 (EMC) / CE				
PHYSICAL					
Standard Model	Dimension, D x W x H(mm)	310 x 438 x 88	410 x 438 x 88	630 x 438 x 88	N/A
	Net Weight (kgs)	12	19	29.3	N/A
Long-run Model	Dimension, D x W x H(mm)	N/A		UPS Unit: 530x438x88 [2U] Battery Pack: 668x438x88 [2U]	580 x 438 x 133[3U]
	Net Weight (kgs)	N/A		UPS Unit: 15 Battery Pack:48	18
ENVIRONMENT					
Operation Humidity	20-90% RH @ 0-40°C (non-condensing)		0-95% RH @ 0-40°C (non-condensing)		
Noise Level	Less than 50 dBA @ 1 Meter		Less than 50 dBA @ 1 Meter Less than 58 dBA @ 1 Meter		
MANAGEMENT					
Smart RS-232 / USB	Supports Windows 2000/2003/XP/Vista/2008/7, Linux and MAC				
Optional SNMP	Power management from SNMP manager and web browser				

*1K-3K: Derate to 80% of capacity in Frequency converter mode or when the output voltage is adjusted to 208VAC.
6K/10K: Derate to 60% of capacity in Frequency converter mode and to 80% when the output voltage is adjusted to 208VAC.
Product specifications are subject to change without further notice

