



## ■ Features

- Slim and Low profile (41mm)
- Fanless and conduction-cooled design
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- -30~+70°C working temperature
- Output voltage and constant current level programmable
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in remote ON-OFF control
- DC OK active signal
- Operating altitude up to 5000 meter (Note.5)
- LED indicator for power on
- 5 years warranty

## ■ Certificates

- Safety: UL/EN62368-1
- EMC: EN 55032 / 55024

## ■ Applications

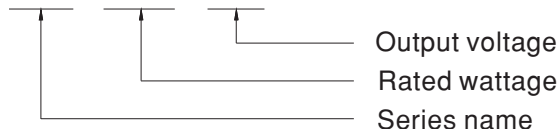
- Industrial automation machinery
- Industrial control system
- Mechanical and electrical equipment
- Electronic instruments, equipment or apparatus
- Test and measurement instrument
- Laser related machine
- Charging related equipment
- Household appliances

## ■ Description

UHP-1000 series is a 1000W single-output slim type power supply with 41mm of low profile design. Adopting the full range 90~264VAC input, the entire series provides an output voltage line of 12V,24V,36V and 48V. In addition to the high efficiency up to 96%, that the whole series operates from -30°C ~ 70°C under air convection without fan. UHP-1000 has the complete protection functions and 5G anti-vibration capability; It is complied with the international safety regulations such as TUV EN62368-1, UL62368-1, and design refers to EN61558-1 and EN60335-1. UHP-1000 series serves as a high performance power supply solution for various industrial applications.

## ■ Model Encoding

UHP - 1000 - 12



**SPECIFICATION**

MODEL		UHP-1000-12	UHP-1000-24	UHP-1000-36	UHP-1000-48	
OUTPUT	DC VOLTAGE	12V	24V	36V	48V	
	RATED CURRENT	80A	42A	28A	21A	
	RATED POWER(convection)	960W	1008W	1008W	1008W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	240mVp-p	240mVp-p	300mVp-p	
	VOLTAGE ADJ. RANGE	By built-in potentiometer, SVR				
		12~14.4V	24~28.8V	36~43.2V	48~57.6V	
	VOLTAGE TOLERANCE Note.3	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	1000ms, 50ms/230VAC 1000ms,50ms/115VAC at full load				
HOLD UP TIME (Typ.)	12ms/230VAC	12ms/115VAC				
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC	250 ~ 370VDC			
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR (Typ.)	PF ≥0.95/230VAC PF ≥0.99/115VAC at full load				
	EFFICIENCY (Typ.)	94%	95%	95.5%	96%	
	AC CURRENT (Typ.)	10.1A/115VAC	5.3A/230VAC			
	INRUSH CURRENT (Typ.)	Cold start 20A/115VAC	40A/230VAC			
	LEAKAGE CURRENT	<0.75mA / 240VAC				
PROTECTION	OVERLOAD	105~120% rated output power Protection type: Constant current limiting with delay shutdown after 3 seconds, re-power on to recover				
	SHORT CIRCUIT	Protection type: Constant current limiting with delay shutdown after 3 seconds, re-power on to recover				
	OVER VOLTAGE	14.5 ~ 16V	29 ~ 33V	43.5 ~ 49V	59 ~ 66V	
		Protection type: Shut down O/P voltage, re-power on to recover				
	OVER TEMPERATURE	Protection type: Shut down O/P voltage, recovers automatically after temperature goes down				
FUNCTION	OUTPUT VOLTAGE PROGRAMMABLE(PV) Note 5	Adjustment of output voltage is allowable to 50 ~ 120% of nominal output voltage Please refer to the Function Manual.				
	OUTPUT CURRENT PROGRAMMABLE(PC) Note 5	Adjustment of constant current level is allowable to 20 ~ 100% of rated current. Please refer to the Function Manual.				
	REMOTE ON/OFF CONTROL	Power ON: "Low" <0 ~ 0.5V or Short circuit Power OFF: "Hi" >2 ~ 5V or Open circuit				
	AUXILIARY POWER	12V@0.5A tolerance±10%, ripple 150mVp-p				
	DC-OK SIGNAL	The TTL signal out, PSU turn on = 4.5 ~ 5.5V; PSU turn off = -0.1 ~ 0.5V. Please refer to the Function Manual.				
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing				
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes				
SAFETY & EMC (Note.6)	SAFETY STANDARDS	UL62368-1, TUV EN62368-1, EAC TP TC 004 approved; design refer to EN61558-1, EN60335-1				
	WITHSTAND VOLTAGE	I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P-FG: 1.25KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC/25°C / 70%RH				
	EMC EMISSION	Parameter	Standard		Test Level / Note	
		Conducted	EN55032 (CISPR32)		Class B	
		Radiated	EN55032 (CISPR32)		Class B	
		Harmonic Current	EN61000-3-2		Class A	
	EMC IMMUNITY	Voltage Flicker	EN61000-3-3		-----	
		EN55024, EN61000-6-2				
		Parameter	Standard		Test Level / Note	
		ESD	EN61000-4-2		Level 3, 8KV air; Level 2, 4KV contact	
		Radiated	EN61000-4-3		Level 3	
		EFT / Burst	EN61000-4-4		Level 3	
Surge		EN61000-6-2		2KV/Line-Line 4KV/Line-Earth		
Conducted		EN61000-4-6		Level 3		
Magnetic Field	EN61000-4-8		Level 4			
Voltage Dips and Interruptions	EN61000-4-11		>95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods			
OTHERS	MTBF	218.86K hrs min. Telcordia SR-332 (Bellcore); 69.81K hrs min. MIL-HDBK-217F (25°C)				
	DIMENSION	240*115*41mm (L*W*H)				
	PACKING	1.74kg; 8pcs/14.9kg/0.74CUFT				
NOTE	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>Derating may be needed under low input voltages. Please check the derating curve for more details.</li> <li>PV/PC functions when users do not use SVR.</li> <li>The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> <li>The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> </ol>					