



500W Slim Type with PFC Switching Supply

UHP-500 series



Features

- Slim and Low profile (31mm)
- Fanless design,500W convection
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- 150% peak load capability(100ms)
- -20~+70°C working temperature
- Protections: Short circuit / Overload / Over voltage / Over temperature
- DC OK active signal and redundant function(option)
- Operating altitude up to 5000 meter (Note.5)
- LED indicator for power on
- 3 years warranty

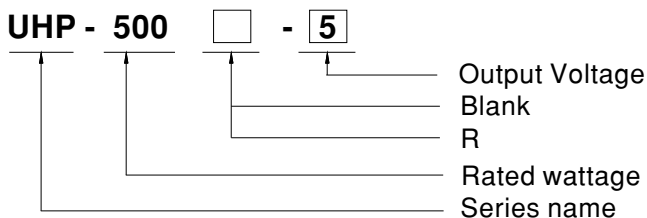
Applications

- Industrial automation machinery
- Industrial control system
- Mechanical and electrical equipment
- Electronic instruments, equipments or apparatus
- LED display application

Description

UHP-500 series is a 500W single-output slim type power supply with 31mm of low profile design. Adopting the full range 90~264VAC input, the entire series provides an output voltage line of 4.2V, 5V, 12V, 15V, 24V, 36V and 48V. In addition to the high efficiency up to 95%, that the whole series operates from -20°C ~ 70°C under air convection without fan. UHP-500 has the complete protection functions and 5G anti-vibration capability ; It is complied with the international safety regulations such as TUV EN60950-1, UL60950-1 and GB4943. UHP-500 series serves as a high performance power supply solution for various industrial applications.

Model Encoding



Type	Description	Note
Blank	Enclosed	In Stock
R	Buit-in DC OK active signal and redundant function.	By request



SPECIFICATION

MODEL		UHP-500□ -4.2	UHP-500□ -5	UHP-500□ -12	UHP-500□ -15	UHP-500□ -24	UHP-500□ -36	UHP-500□ -48	
OUTPUT	DC VOLTAGE	4.2V	5V	12V	15V	24V	36V	48V	
	RATED CURRENT	80A	80A	41.7A	33.4A	20.9A	13.9A	10.45A	
	RATED POWER(convection)	336W	400W	500.4W	501W	501.6W	500.4W	501.6W	
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p	200mVp-p	200mVp-p	240mVp-p	360mVp-p	360mVp-p	
	VOLTAGE ADJ. RANGE	3.6~4.4V	4.5~5.5V	11.4~12.6V	14.3~15.8V	22.8~25.2V	34.2~37.8V	45.6~50.4V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%	
	LOAD REGULATION	±1.0%	±1.0%	±0.5%	±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		127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	PF ≥ 0.95/230VAC PF ≥ 0.98/115VAC at full load							
	EFFICIENCY (Typ.)	89%	90%	94%	94%	94.5%	95%	95%	
	AC CURRENT (Typ.)	4.85A/115VAC		2.6A/230VAC					
	INRUSH CURRENT (Typ.)	Cold start 30A/115VAC		60A/230VAC					
	LEAKAGE CURRENT	<0.75mA / 240VAC							
PROTECTION	OVERLOAD	110~140% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	4.62 ~ 5.46V	5.75 ~ 6.75V	13.2 ~ 15.6V	16.5 ~ 19.5V	26.4 ~ 31.2V	39.6 ~46.8V	52.8 ~ 62.4V	
	OVER TEMPERATURE	Protection type :Shut down O/P voltage, recovers automatically after temperature goes down							
FUNCTION	DC OK SIGNAL(Optional)	Contact rating(max.):30Vdc/1A resistive load							
	REDUNDANT(Optional)	For parallel connection protection:For parallel applications, when one PSU can not work , the another one will be automatically enabled. This can prevent the system crash, and provide the reliability of system							
ENVIRONMENT	WORKING TEMP.	-20 ~ +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	UL60950-1,TUV EN60950-1, CCC GB4943, EAC TP TC 004 approved;Design refer to EN60335-1,EN61558-2-16							
	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	Compliance to EN55032,GB/T9254,Class B, EN61000-3-2,-3, EAC TP TC 020							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11;EN61000-6-2 (EN50082-2), heavy industry level ,criterial A,EAC TP TC 020							
OTHERS	MTBF	168K hrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	232*81*31mm (L*W*H)							
	PACKING	0.905kg; 16pcs/15.48kg/0.82CUFT							
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Tolerance :includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>5.The ambient temperature derating of 3.5°C/1000m is needed for operating altitude greater than 2000m(6500ft)</p> <p>6. The power supply is considered a component which will be installed into a final equipment. 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 http://www.meanwell.com)</p>								