





















Features

- Slim Low profile (31mm)
- Fanless design,350W convection
- Withstand 300VAC surge input for 5 seconds
- · Built-in active PFC function
- 150% peak load capability(100ms)
- -30~+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

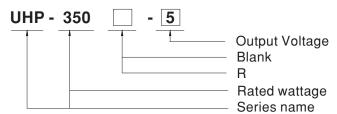
■ Applications

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

■ Description

UHP-350 series is a 350W single-output slim type power supply with 31mm of low profile design. Adopting the full range $90\sim264$ VAC input, the entire series provides an output voltage line of 3.3V, 4.2V, 5V, 12V, 15V, 24V, 36V and 48V. In addition to the high efficiency up to 94%, that the whole series operatesfrom -30°C ~ 70°C under air convection without fan. UHP-350 has the complete protection functions and 5G anti-vibration capability; It is complied with the international safety regulations such as TUV EN60950-1, EN60335-1, UL60950-1 and GB4943. UHP-350 series serves as a high performance power supply solution for various industrial applications.

■ Model Encoding



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

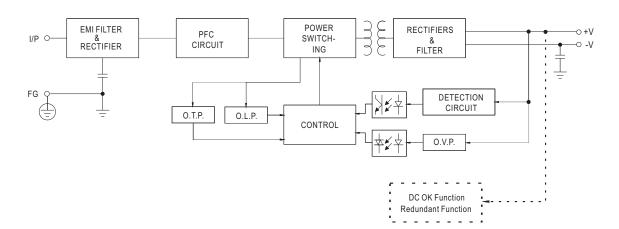
UHP-350 series

SPECIFICATION

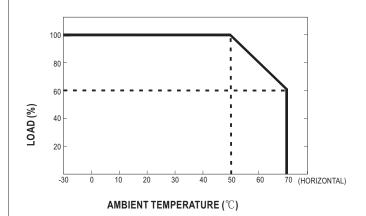
MODEL		UHP-350 -3.3	UHP-350 -4.2	UHP-3505	UHP-35012	UHP-35015	UHP-35024	UHP-35036	UHP-35048	
	DC VOLTAGE	3.3V	4.2V	5V	12V	15V	24V	36V	48V	
	RATED CURRENT	60A	60A	60A	29.2A	23.4A	14.6A	9.75A	7.3A	
	RATED POWER(convection)	198W	252W	300W	350.4W	351W	350.4W	351W	350.4W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	240mVp-p	240mVp-p	240mVp-p	
OUTPUT	VOLTAGE ADJ. RANGE	3.2~3.5V	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%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.3%	±0.3%	±0.3%	±0.3%	±0.3%	
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	SETUP, RISE TIME	2000ms, 80ms/230VAC 3000ms, 80ms/115VAC at full load								
	HOLD UP TIME (Typ.)	10ms/230VAC 10ms/115VAC								
	VOLTAGE RANGE Note.4	90 ~ 264VAC	127 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz								
	POWER FACTOR (Typ.)	PF≥0.94/230VA	AC PF≥0.98/11	5VAC at full load						
INPUT	EFFICIENCY (Typ.)	88.5%	89%	90%	91%	92%	94%	94%	94%	
INFOI	AC CURRENT (Typ.)	4A/115VAC	2A/230VAC							
	INRUSH CURRENT (Typ.)	Cold start 30A/1	15VAC 60A/2	30VAC						
	LEAKAGE CURRENT	<0.75mA / 240VA								
		110~140% rated	output power							
	OVERLOAD	110~140% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed								
PROTECTION		3.8 ~ 4.6V	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	
FROILCHON	OVER VOLTAGE	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								
	DC OK SIGNAL(Optional)	Contact rating(max.):15Vdc/10mA resistive load								
FUNCTION	REDUNDANT(Optional)				ications, when one rovide the reliabilit	PSU can not work	ς, the another one	will be automatica	ally	
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
ENVIRONMENT	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 STANDARDS	UL60950-1,TUV EN60950-1,EN60335-1,CCC GB4943 approved								
	WITHSTAND VOLTAGE	VP-O/P:3.75KVAC V/P-FG:2KVAC O/P-FG:1.25KVAC								
SAFETY & EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG,O/P-FG:100M Ohms/500VDC/25°C/70%RH								
(Note.6)	EMC EMISSION	Compliance to EN55032,GB9254,Class B, EN55014,EN61000-3-2,-3								
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11;EN61000-6-2 (EN50082-2), heavy industry level ,criterial A								
	MTBF	285 K hrs min. MIL-HDBK-217F (25°C)								
OTHERS	DIMENSION	220*62*31mm (L*W*H)								
	PACKING	0.68 kg;16 pcs/1	1.88 kg/0.63CUF	Г						
NOTE	Ripple & noise are measured Tolerance includes set up tole Derating may be needed unders. The ambient temperature dera The power supply is considered.	becially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Sured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Sured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Sured to 100 parallel capacitor. Sured for more details. Sured for more details. Sured for operating altitude higher than 2000m(6500ft) and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft) and one on high parallel capacitor. Sured for more details. Sured for operating altitude higher than 2000m(6500ft) and one on high parallel capacitor. Sured for more details. Sured for operating altitude higher than 2000m(6500ft) and one of the form of								



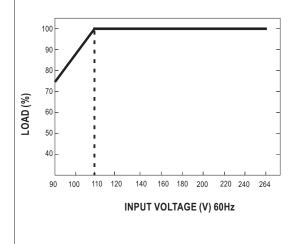
■ Block Diagram



■ Derating Curve



■ STATIC CHARACTERISTIC

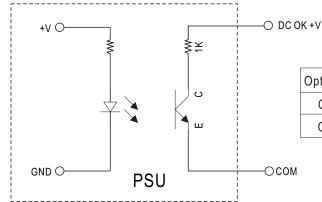




■ Function Manual

1.DC_OK Signal

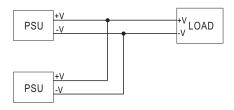
DC_OK is a collector shorted signal. It is used by an optocoupler in the power supply which indicates the output status of the power supply as exhibited below.



Optocoupler C-E Pin Conduction	PSU turns on	DC ok	
Optocoupler C-E Pin Open	PSU turns off DC fail		
Optocoupler Rating(max.)	15Vdc/10mA resistive load		

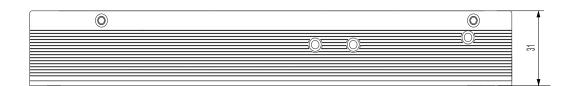
2.Redundant function

- (1) UHP-350R is built-in redundant function and can be connected 2 units in parallel .
- (2) When in parallel operation the maximum load should not be greater than the rated power of any PSU.





Mechanical Specification CASE NO.:232C Unit:mm



AC Input Terminal(TB1) pin NO. Assignment

7.60 input forminal (121) pin 140.760 igililiont						
Pin No.	Assignment	Terminal	Max mounting torque			
1	AC/L	(550001))				
2	AC/N	(DEGSON) DG28C-B-03P	5Kgf-cm			
3	÷					

DC OK Connector(CN10):JST B2B-PH-K-S or requivalent

Pin No.	Assignment	Mating Housing	Terminal		
1	DC COM	JST PHR-2	JST SPH-002T-P0.5S		
2	DC OK +V	or requivalent	or requivalent		

DC Output Terminal (TB2,TB3) pin NO. Assignment

Pin No.	Assignment	Terminal	Max mounting torque
1,2	-V	(MW)	
3,4	+V	TB-HTP-200-40A	8Kgf-cm

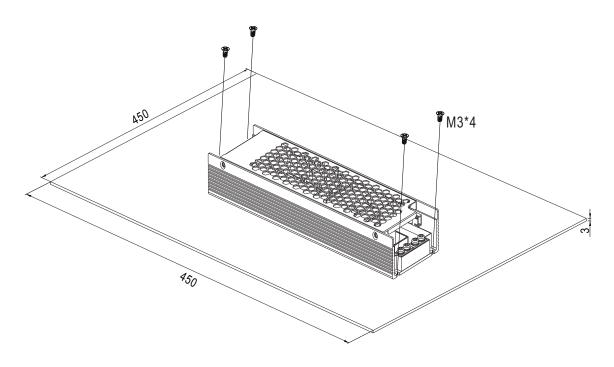


■ Installation

1. Operate with additional aluminum plate

In order to meet the "Derating Curve" and the "Static Characteristics", UHP-350 series must be installed onto an aluminum plate (or the cabinet of the same size) on the bottom. The size of the suggested aluminum plate is shown as below. And for optimizing thermal performance, the aluminum plate must have an even and smooth surface (or coated with thermal grease), and UHP-350 series must be firmly mounted at the center of the aluminum plate.

unit:mm



2.For heat dissipation, at least 5cm installation distance around the PSU should be kept, shown as below:

