





#### **Features:**

+WIDE AC input / 160-264VAC

Optional active PFC function

Can use as 2 Stage battery Charger

150% peak load capacity for 30 sec

Protection: Short circuit / Overload / Over Voltage

Protection by internal fuse

Thermo On/Off control Fan, Charging Fan

Optional Relay contact signal output for AC OK

+Optional Remote ON-Off control

Optional active current sharing up to (1+1)

Cooling by free air convection(500W)

100% full load burn-in test

2 years warranty

## **Applications:**

Security systems
Emergency Lighting system
Alarm system
UPS system
Central monitoring system
Access systems



**1KO-220PSU** series is a 1000W AC/DC security power supply, allowing the input range between 170VAC and 264VAC and incorporating optional PFC function. In addition to primary output, This Power Supply can use as battery charger for UPS application, with the smaller rated current, that need online power application for security access system required.

**1KO-220PSU** delivers an efficiency up to 90%; It can operate with air convection under -20°C through +80°C. This series is designed with thorough alarm features, can adding AC OK signaling; Morever, the relay contact is provided to facilitate users system designs.

#### **Main MODEL:**

12VDC: 1K0-220S12(13.5 ~ 15 by order) 24VDC: 1K0-220S24(27 ~ 36 by order) 48VDC: 1K0-220S48(53 ~ 72 by oder)

110VDC: 1K0-220S110 (220VDC CAN BE ORDERED)











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## SPECIFICATION:

MODEL		1K0-220PSU12	1K0-220PSU24	1K0-220PSU48	1K0-220PSU110	
OUTPUT	OUTPUT NUMBER	CH1	CH1	CH1	CH1	
	DC VOLTAGE	12.0V	24.0V	48.0V	110.0V	
	RATED CURRENT	83A	41A	21A	9.1A	
	CURRENT RANGE	0~83.0A	0~41.7A	0~21.0A	0~10.0A	
	RATED POWER	996W	1000W	1000W	1100W	
	RIPPLE & NOISE(Note2)	150mVp-p	150mVp-p	150mVp-p	150mVp-p	
	VOLTAGE ADJ. RANGE	CH1: 10~13.5V	CH1: 22~27.5V	CH1: 47~59V	CH1: 90~125V	
	VOLTAGE TOLERANCE (Note2)	±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 Note.4	1500ms, 30ms/230VAC2000ms at full Load				
	HOLD UP TIME	40ms/230VAC at full Load				
INPUT	VOLTAGE RANGE	175~265VAC				
	FREQUENCY RANGE	47~63Hz				
	POWER FACTOR (Typ.)		F≥0.65/230VAC at full Loa			
	EFFICIENCY (Typ.)	84%	86%	87%	89%	
	AC CURRENT (Typ.)	10A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 55A/230AC				
	LEAKAGE CURRENT	≤1mA/240VAC				
PROTECTION	OVERLOAD	105~125% rated output power				
	OVERLOAD	Protection type: Constant current Limiting, recovers automatically after fault condition is removed				
	OVER VOLTAGE	13.85~16.23VDC	28.98~32.66VDC	57.49~60.67VDC	131~145VDC	
	OVER VOLTAGE	Protection type: Shut down o/p voltage, re-power on to recover				
	OVER TEMP CONTROL	70°C ± 5°C (TSW1) DETECT ON MAIN HEATSINK				
ALARM FUNCTION	AC OK Note.5	OPTIONAL Relay contact output, ON: AC Okay; OFF: AC Fail; Max Rating: 30V-1A				
	Remote On/Off control	OPTIONAL Normal working CN3 is open, PSU is off if CN3 is short				
ENVIRONMENT	WORKING TEMP.	-20~+70°C REFER TO DERATING CURVE				
	WORKING HUMIDITY	20~90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-20~+85°C, 10~90% RH				
	TEMP. COEFFICIENT	±0.03% /°C (0~45°C) on CH1 Output				
	VIBRATION	10~500Hz 2G 10min./ 1cycle, 60min each along X, Y, Z				
SAFETY & EMC (NOTE4)	SAFETY STANDARD	UL60950-1, TUV EN60950-1, EAC TP TC 004 approved				
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC I/P-FG: 2.0KVAC O/P-FG: 0.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG: 100MΩ / 500VDC / 25°C / 70%RH				
	EMC EMISSION	Compliance EN55032 (CISPR32) Class B, EN61000-3-2, -3, EAC TP TC 020				
	EMC IMMUNITY	Compliance EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A				
OTHERS	MTBF	257K hrs. min. MIL-HDBK-217F (25°C)				
	DIMENSION	250*130*64mm				
	PACKING	2.3Kg; 6pcs/14 Kg				
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temp					
	<ol> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using 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> </ol>					
	<ul><li>4. Length of set up time is measured at first cold start. Tuning ON/OFF the power supply may lead to increase of the set up time.,</li></ul>					
	5. Please refer to suggested application					
	6. The power supply is considered a component which will be installed into 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 components power supplier					
	The ambient temp derating of 3.5	The ambient temp derating of 3.5°C/1000m with fan less model and 5°C/1000m with fan model for operating altitude higher than 2000m.				







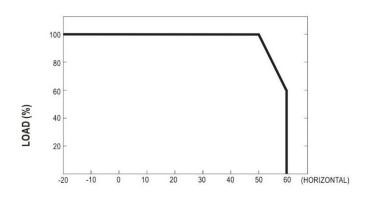




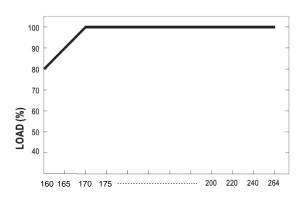


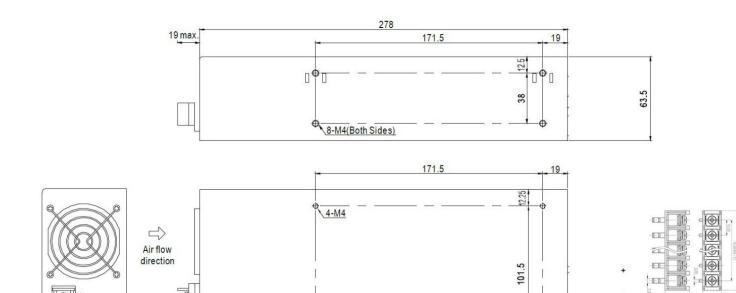


# ■ Derating Curve



# ■ Output Derating VS Input Voltage







9.25







