

#### MPS1000-□ Series



### **▲** Features

Superior performance with small ripple

230VAC input

100% full load burn-in test

Protections:short circuit/overload/over voltage/over temperature

LED indicator for power on

Optional installation accessories, can be installed flat

Compensating output voltage function

Instant overload capability is 105%-130%

"Three proof" treatment, suitable for severe environment

Seismic protection

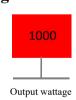
All aluminum case

Surge protection

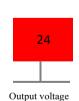
2 years warranty

# **▲** Model Encoding









# **▲** Applications

Industrial automation control system

Intelligent control system

Electronic instruments and devices

LED control

Household appliances



### Specification

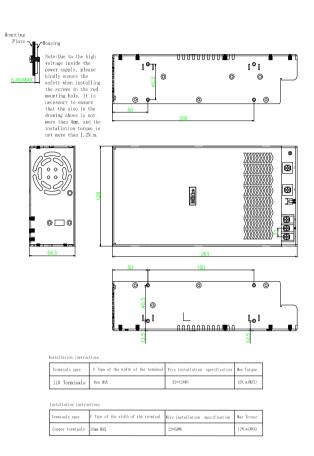
Specification										
Input										
Voltage range	176-264VAC 25	50-370VDC								
AC current	10A/230VAC									
Frequency range	47-63Hz									
Inrush current (max)	90A/230VAC									
Output	<u> </u>									
DC voltage (V)	5V	12V	24V	48V	60V	70V	80V	110V		
Voltage ADJ.range	±10%									
Rated Current(A)	150A	83.3A	41.7A	20.8A	16.7A	14.3A	12.5A	9A		
Rated power(W)	750W	999.6W	1000.8W	998.4W	1002W	1001W	1000W	990W		
Ripple & noise(max ) Note.2	150mVp-p	150mVp-p	200mVp-p	360mVp-p	480mVp-p	500mVp-p	600mVp-p	800mVp-p		
Voltage tolerange Note.3	±1%	±1%	±1%	±1%	±1%	±1%	±1%	±1%		
Line regulation Note.4	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
Load regulation Note.5	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
Efficiency	85.00%	85.00%	88.00%	89.00%	89.00%	89.00%	89.00%	89.00%		
Setup, rise time		1000ms 50ms/230VAC (at full load)								
Hold up time	20ms/230VAC (at full load)									
Status indicator	Green LED									
Protection										
Troccion	105%-130% rate	ed output nower								
Overload	105%-130% rated output power  Protection type: 5-48V shut-off mode, 60-110V Limiting current output									
	5.75-6.75V	· · ·						126.5-148.5V		
Over voltage(V)	5.75-6.75V 13.8-16.2V 27.6-32.4V  Protection type: shut down o/p voltage,re power on to				80.5-94.5V	92-108V	120.3-148.3 V			
Over temperature			-	atically after temperature	ann dawn					
-	Flotection type.s	nut down o/p voltage	e,recovers amona	atically after temperature	goes down					
Safety and EMC	I/D O/D-2VXIAC	I/D EC-2VVAC (	D/D EC-0 5VVA	,						
Withstand voltage	\[ \frac{\text{VP-O/P:3KVAC}}{\text{UP-FG:2KVAC}}  \text{O/P-FG:0.5KVAC} \] \[ \frac{\text{UP-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25 \text{°C/70 \text{° RH}}}{\text{UP-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25 \text{°C/70 \text{° RH}}} \]									
Isolation resistance				0 % KH						
Safety standards Note.6	Design refer to EN IEC 62368-1、GB4943.1			0444	T41	I <del>-</del>				
EMC emission	Parameter			Standard		Test Level				
	Conducted			EN 55032	Class A					
	Radiated			EN 55032		Class A				
	Voltage Flicker			EN 61000-3-3		Design refer to Class A				
	Harmonic Current			EN IEC 61000-3-2		Design refer to Class A				
EMC immunity	Parameter			Standard	Test Leve					
	ESD			EN 61000-4-2		Level 3 8KV air;Level 2 4KV contact				
	Radiated Susceptibility			EN 61000-4-3		Level 2 3V/m				
	EFT/Burest			EN 61000-4-4		Level 3 2KV				
	Surge			EN 61000-4-5	Level 3 2KV	Level 3 2KV/Line-Line;Level3 4kV/Line-Line-FG				
	Conducted			EN 61000-4-6	Level 2 3V	Level 2 3V				
	Magnetic Field			EN 61000-4-8		Level 2 3A/m < 5% residual voltage for 0.5 cycles ,70% residual voltage for 25				
	Voltage Dips a	nd interruptions		EN 61000-4-11		cycles , < 5% residual voltage for 0.5 cycles , 70% residual voltage for 25				
Environmental	1									
Working temperature	- 20~+60 °C (Refer to "Derating curve")									
Storage temperature	- 40∼+85°C									
Storage humidity	10-95 % RH									



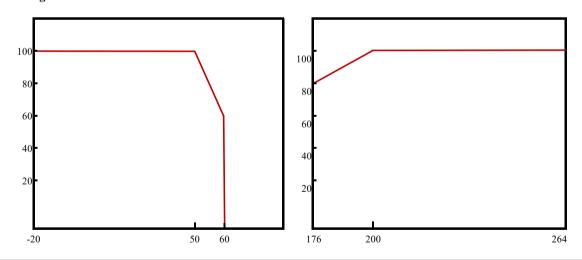
Others						
Mean time between failu	ime between failure ≥251.6K hrs MIL-HDBK-217F(25°C)					
Installation	Attachment: installation accessories					
Protection class	IP20					
Weight	About 2kg					
Length*width*height	260*130*63.5mm					
Data	Details	Model name				
	MPS 750W 150A/5V	MPS1000-05				
	MPS 999.6W 83.3A/12V	MPS1000-12				
	MPS 1000.8W 41.7A/24V	MPS1000-24				
	MPS 998.4W 20.8A/48V	MPS1000-48				
	MPS 1002W 16.7A/60V	MPS1000-60				
	MPS 1001W 14.3A/70V	MPS1000-70				
	MPS 1000W 12.5A/80V	MPS1000-80				
	MPS 990W 9A/110V	MPS1000-110				



## Installation Instruction



### **Derating curve**



**Note:** 1.All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25°C of ambient temperature.

- 2.Ripple & noise are measured at 20MHZ of bandwidth by using a 12"twisted pair-wire teminated with a 0.1uf & 47uf parallel capacitor."
- 3.Tolerance:includes set up tolerance,line regulation and load regulation.
- 4.Line regulation is measured from low line to high line at rated load.
- 5. Load regulation is measured from 0% to 100% rated load.
- 6.According to the requirements of GB4943.1,the power supply is only used for safe use in areas below sea level of 2000M and non-tropical climates.