







## **Features**

- Wide input voltage range: 90-264VAC
- Output protection: Overvoltage, overcurrent, short circuit, and overtemperature protection
- Input undervoltage protection function
- Natural cooling: 60W (110VAC) / 72W (220VAC)
- Isolation voltage: 3000VAC
- High reliability: Long-life electrolytic capacitors

Model			TPS-MPH72S-12V	TPS-MPH72S-24V	TPS-MPH72S-48V
Output	Output Voltage		12V	24V	48V
	"Voltage Range (Natural Cooling)"	100-176VAC	0-5A	0-2.5A	0-1.25A
		176-264VAC	0-6A	0-3A	0-1.5A
	"Power (Natural Cooling)"	100-176VAC	60W	60W	60W
		176-264VAC	72W	72W	72W
	Efficiency (90VAC/246VAC,Max)		89%	89%	89%
	Ripple (Max)		120mVp-p	240mVp-p	480mVp-p
	Voltage Accuracy		±3%	±2%	±2%
	Voltage Adjustment Range		9~15V	22~27V	46~51V
	Voltage Overshoot		10%		
	Line Regulation		±1%		
	Load Regulation		±2%		
	Start-up、Rise、Hold-up Time		1S、20ms、60ms/230VAC		
	Rated Voltage		100~240VAC		
	Additional Features		90~264VAC		
	Input Frequency		Rated Frequency: 50/60Hz,Operating Frequency Range: 47-63Hz		
Input	Standby Power		≤0.5W		
	Input Current		≤1.5A		
	Power Factor		≥0.5		
	Inrush Current (Max)		60A		
	Leakage Current(Max)		0.25mA		
Protection	Input Undervoltage Protection		60V-80V		
	Output Overcurrent Protection		110%-200% of rated current: Hiccup mode; automatically recovers when the current drops to 105% of rated output current.		
	Output Overvoltage Protection		110%-140% of rated output voltage: Output shut down; can be restarted to recov		
	Output Short Circuit Protection		Hiccup mode: Automatically recovers after short circuit removal.		
	Overtemperature Protection		Hiccup mode: Automatically recovers after temperature drops.		



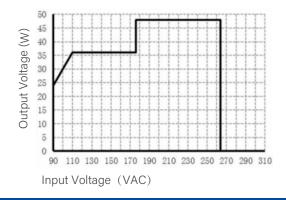
# **TPS-MPH72S Series**

# Single Output Open Frame Power Supply

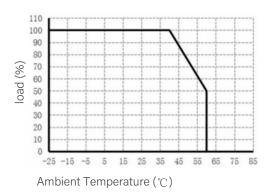
Environment	Operating Temperature/Humidity	"-30~60°C (Please refer to the "derating curve") 20~90%RH, non-condensing"			
	Storage Temperature/Humidity	"-40~85°C, 10~95%RH"			
	Temperature Coefficient	±0.03%/~C(0-50°C)			
	Vibration	10-500Hz, 2G for 10 minutes per cycle, 60 minutes for each X, Y, and Z axis.			
Safety EMC	Safety Standard	EN 62368-1			
	EMC	CISPR32/EN55032 CLASS B,EN61000-4-2/3/4/6 CLASS B			
	Withstand Voltage	I/P-0/P:3000VAC,I/P-FG:1500VAC,O/P-FG:500V;Test for one minute; leakage current is less than 5mA.			
	Insulation Resistance	I/P-0/P,I/P-FG,0/P-FG:>10OM,Ohm/500VDC			
Mechanical Specifications	Dimensions(L*W*H)	101.6*50.8*18.5mm			
	Weight	About 93g			
Notes	<ol> <li>All parameters are measured under the following conditions: rated input voltage of 220V AC, rated load, ambient temperature of 25°C, and humidity of 70%.</li> <li>Accuracy: Includes setting error, voltage regulation, and load regulation.</li> </ol>				
	3. Ripple testing: Connect the power supply and load with a 30CM twisted pair. The load is connected with a 0.1µF ceramic capacitor and a 47µF capacitor, and measured at the load end using a 20MHz oscilloscope.				
	4. Voltage regulation: Measured with the input voltage varying from low to high under rated load conditions.				
	5. Load regulation: Measured with the output varying from 0% load to 100% load.				

#### **Product Characteristic Curve**

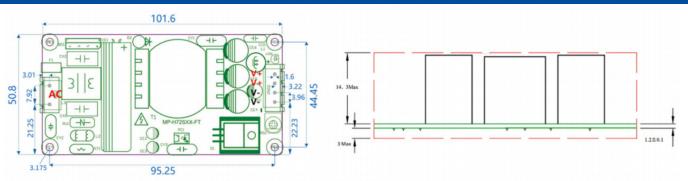
• Input Voltage - Output Power Curve



• Temperature - Load Derating Curve



### Mechanical Dimensions(mm)





This electronic device must not be disposed of in the household waste at the end of its service life. For your return, there are free collection points for electrical appliances and, if necessary, additional points of acceptance for the reuse of the devices in your area. The addresses an be obtained from your city or cummunal administration. If the old electrical or electronic device contains personal data, you are esponsible for deleting it before you return it. Further information: www.elektrogesetz.de