





### **Features**

- Fan assisted cooling: 250W(110V)300W(220V)
- Natural cooling: 180W(110V)250W(220V)
- Wide input voltage range: 100-264VAC
- -  $25^{\circ}$ C ~ +70°C operation temperature
- Active PFC function
- Isolated voltage: 3750VAC
- LED indicator
- Adjustable output voltage
- High reliability, long lifespan, 3-year warrenty
- Input undervoltage/overvoltage/overcurrent/short-circuit/ overtemperature protection

Model			TPS-MPH72S-12V	TPS-MPH72S-19V	TPS-MPH72S-24V	TPS-MPH72S-36V	TPS-MPH72S-48
Output	Output voltage		12V	19V	24V	36V	48V
	Current range (Natural cooling)	100-176VAC	0-15A	0-9.48A	0-7.5A	0-5A	0-3.75A
	Current range (Natural cooling)	176-264VAC	0-20.84A	0-13.16A	0-10.42A	0-6.95A	0-5.21A
	Current range (20CFM Fan cooling)	100-176VAC	0-20.84A	0-13.16A	0-10.42A	0-6.95A	0-5.21A
	Current range (20CFM Fan cooling)	176-264VAC	0-25A	0-15.79A	0-12.5A	0-8.33A	0-6.25A
	Power (Natural cooling)	100-176VAC	180W	180W	180W	180W	180W
	Power (Natural cooling)	176-264VAC	250W	250W	250W	250W	250W
	Power (20CFM Fan cooling)	100-176VAC	250W	250W	250W	250W	250w
	Power (20CFM Fan cooling)	176-264VAC	300W	300W	300W	300W	300W
	Efficiency (115VAC/230VAC,typ)		90%/92%	91%/93%	91%/94%	92%/94%	92%/94%
	Efficiency (115VAC/230VAC,min)		88%/90%	89%/91%	89%/91%	90%/92%	90%/92%
	Ripple (Max)		120mVp-p	190mVp-p	240mVp-p	240mVp-p	300mVp-p
	Adjustable voltage range (adjustable resistor)		11.4~12.6V	18.5~20.5V	22.8~25.2V	33~40V	45.6~50.4V
	Voltage accuracy		±3%				
	Voltage overshot		<10%				
	Line regulation rate		±1%				
	Load regulation rate		±3%				
	Start-up time (mzx)		1s				
	Rise time (typ)		10ms				
Input	Rated voltage		100-240VAC				
	Voltage range		100-264VAC				
	Frequency range		Rated frequency 50/60Hz, operational frequency range: 47-63Hz				
	Efficiency factor		>0.92(at full load 115/230VAC)				
	Input current (max)		2.7A/115VAC, 1.7A/230VAC				
	Standby power consumption (Max)		0.5W				
	Inrush current (Max)		Cold start: 60A/115VAC, 120A/230VAC				
	Leakage current (Max)		0.7mA/240VAC				
Protection	Input undervoltage protection		60-85VAC				
	Output over current protection		120%-200% output rated current, Hiccup mode, automatically recovers				
	Output over voltage protection		110%-130% output rated voltage, output shuts down; restarts upon recovery				
	Ohort circuit protection		Hiccup mode, automatically recovers after short-circuit removal				
	Over-temperature protection		Hiccup mode, automatically recovers after temperature drops				

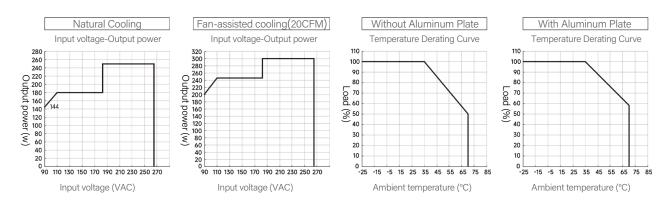


# TPS-MPH250S Series

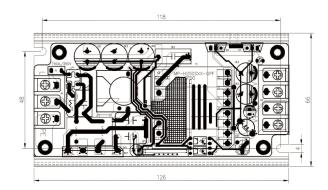
## Single Output Open Frame Power Supply

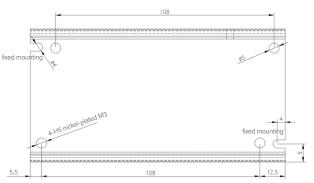
Environmental	Operating Temperature and Humidity	-25°C~+70°C, 20%~90% RH non-condensing (refer to temperature derating curve )		
	Storage Temperature and Humidity	40°C~+8510%-95%RH		
	Temperature coefficient	±0.3%/°C (0-50°C)		
	Vibration	10-500Hz.2G for 10 minutes per cycle, 60 minutes on each of the X, Y, and Z axes.		
Safety and EMC	Safety standard	IEC62368		
	EMC	CISPR32/EN55032 CLASS B.EN61000-4-2/3/4/6 CLASS B		
	Withstand voltage	I/P-0/P:3750VAC, I/P-FG:1500VAC,0/P-FG: 500V		
	Insulation resistance	I/P-0/P, I/P-FG, 0/P-FG: >100M Ohm/500VDC		
Other	Dimensions(LxWxH)	126×66×36mm		
	Weight	approximately 367g		
Notes	1. Ripple and Noise Testing Standard: Connect 0.1µF and 47µF capacitors in parallel at the output. Use an oscilloscope with 20MHz bandwidth.			
	2. Testing Conditions: Fan cooling at 20CFM, ambient temperature at 25°C, input voltage of 230VAC, and full load.			
	3. Typical Values: Unless otherwise specified, all values are measured at 230VAC input and an ambient temperature of 25°C.			
	4. Voltage Regulation: Measured with input voltage varying from low to high at rated load.			
	5. Load Regulation: Measured with the output load changing from 1% to 100%.			
	6. Accuracy: Includes setting error, voltage regulation, and load regulation.			
	7. Polarity for AC and DC Input: For AC input, there is no distinction between L (live) and N (neutral); for DC input, L is positive, and N is negative.			

### **Characteristic 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 and 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