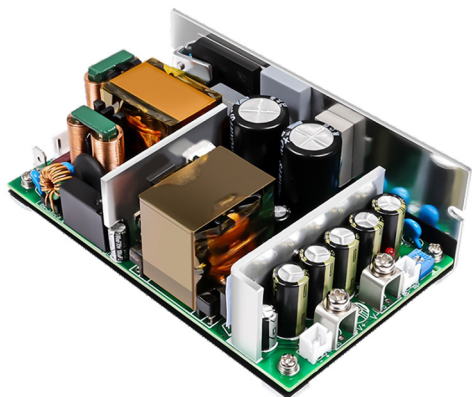


Features



- Aluminum enclosure L×W×H: 127×76.2×40mm
- Natural convection: 320W
- Forced convection: 600W(24V 25CFM)
- Wide input voltage range: 100-264VAC
- Active PFC function
- LED indicator for operational status
- -25°C~+70°C operational temperature
- Insulation voltage: 3750VAC
- High liability, long lifespan, 3-year warranty
- Input undervoltage protection, output short circuit protection, overcurrent, overvoltage protection, overtemperature protection

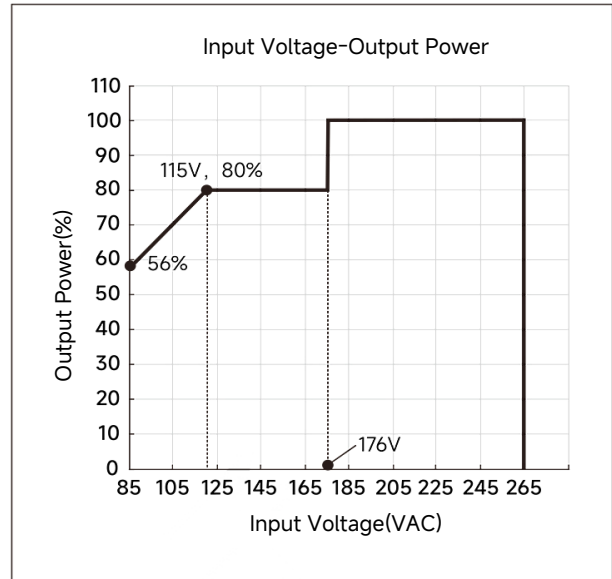
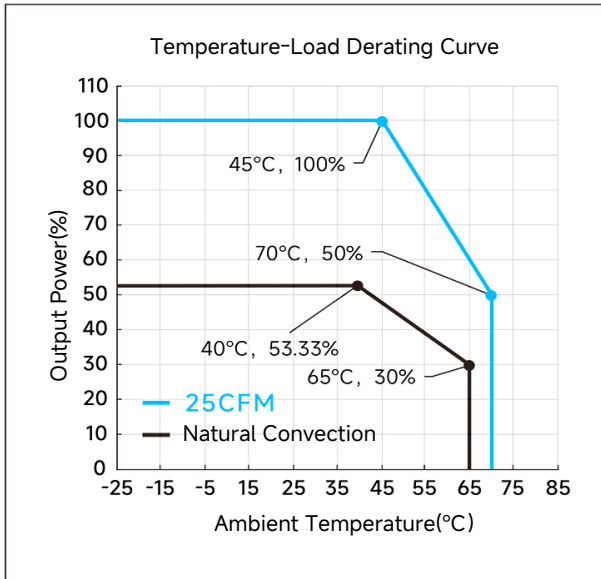
This series is a 600W AC-input switch-mode power supply with an input voltage range of 100-264VAC, providing output voltages of 24V, 27V, 36V, and 48V. With efficiency reaching up to 94%, it operates reliably in environments ranging from -25°C to +70°C. This series includes comprehensive protection features, complies with international safety standards, and is suitable for industrial automation machinery, industrial control systems, communication equipment, LED applications, smart home systems, electronic instruments, and medical devices.

Specifications

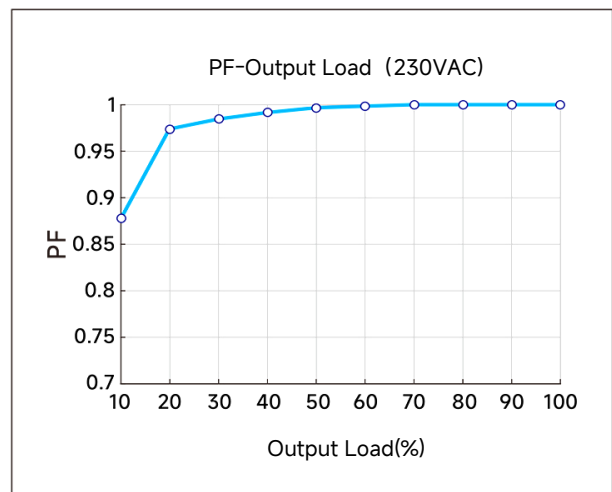
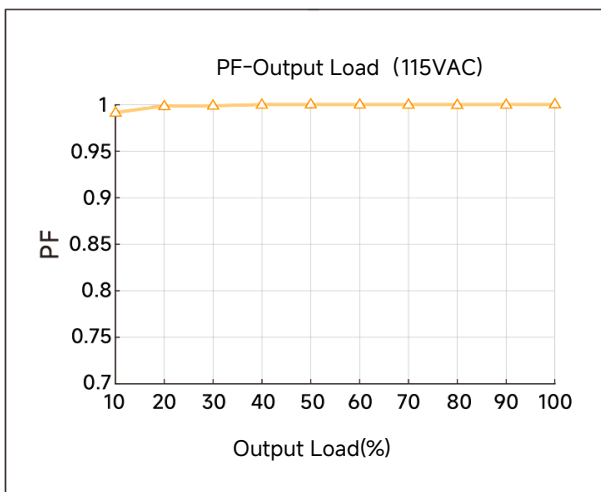
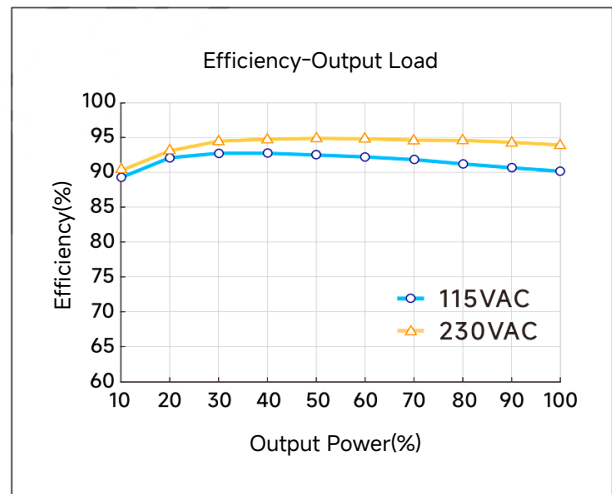
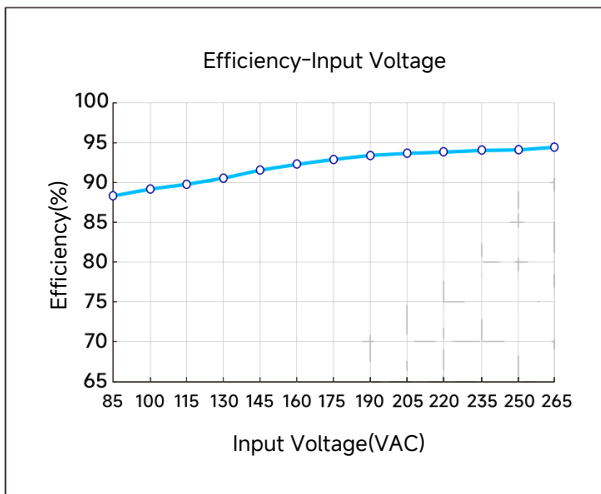
Model	Cooling Method	Output Power*	Rated Output Voltage/ Current(Vo/Io)	Input Voltage Range	Efficiency (Typ.)*	Output Voltage Adjustable Range ADJ(V)	Max Capacitive Load at Room Temperature
TPS-GSH600S-24V	Natural Cooling	192W	24V/8A	100~176VAC/ 141~250VDC	92%	22-27V	6000μF
	Forced Convection	360w	24V/15A		91%		
	Air Cooling	320W	24V/13.34A	176~264VAC/ 250~370VDC	95%		
	Forced Convection	600W	24V/25A		94%		
TPS-GSH600S-27V	Natural Cooling	192W	27V/7.12A	100~176VAC/ 141~250VDC	92%	24-29V	5000μF
	Forced Convection	360w	27V/13.34A		91%		
	Air Cooling	320W	27V/11.85A	176~264VAC/ 250~370VDC	95%		
	Forced Convection	600W	27V/22.22A		94%		
TPS-GSH600S-36V	Natural Cooling	192W	36V/5.34A	100~176VAC/ 141~250VDC	92%	33-39V	3000μF
	Forced Convection	360W	36V/10A		91%		
	Air Cooling	320W	36V/8.89A	176~264VAC/ 250~370VDC	95%		
	Forced Convection	600W	36V/16.67A		94%		
TPS-GSH600S-48V	Natural Cooling	192W	48V/4A	100~176VAC/ 141~250VDC	92%	44-54V	2000μF
	Forced Convection	360W	48V/7.5A		91%		
	Air Cooling	320W	48V/6.67A	176~264VAC/ 250~370VDC	95%		
	Forced Convection	600W	48V/12.5A		94%		
Notes	1. * Under any steady-state condition, the total output power must not exceed the rated total power. When output voltage is adjusted upward, total output power must not exceed the rated output power. If output voltage exceeds the rated voltage by more than 5%, output power must be reduced to 80% of the rated power. When output voltage is adjusted downward, output current must not exceed the rated output current. 2. *Efficiency testing conditions: 25°C ambient temperature, input at 230VAC; for full-load efficiency testing, the fan should be powered by an external source, so the fan's power consumption is not included in the input power measurement						

Electrical Specifications					
Item		TPS-GSH600S-24V	TPS-GSH600S-27V	TPS-GSH600S-36V	TPS-GSH600S-48V
Output	Rated voltage	24V	27V	36V	48V
	Current range(Natural cooling)	0-13.34A	0-11.85A	0-8.89A	0-6.67A
	Current range(25CFM Fan cooling)	0-25A	0-22.22A	0-16.67A	0-12.5A
	Output power(Natural cooling)	320W	320W	320W	320W
	Output power(25CFM Fan cooling)	600W	600W	600W	600W
	Efficiency(115VAC/230VAC,typ)	92%/94%	92%/94%	92%/94%	92%/94%
	Efficiency(115VAC/230VAC,Min)	90%/92%	90%/92%	90%/92%	90%/92%
	Ripple voltage	<200mVp-p	<200mVp-p	<300mVp-p	<300mVp-p
	Voltage adjustment range(adjustable resistor)	22~27V	24~29V	33~39V	44~54V
	Voltage accuracy	±1%			
	Voltage overshoot	<10%			
	Line regulations	±0.5%			
	Load regulation	±1%			
	Start-up time	1S(typ.)			
	Rise time	8ms(typ.)			
	Hold time	>10ms,14ms(typ.)115/230VAC,full load			
Input	Rated voltage	100-240VAC			
	Voltage range	100-264VAC(Refer to the input voltage derating curve)			
	Input frequency	Rated frequency50/60Hz,operating range47-63Hz			
	Power factor	>0.98(full load115/230Vac)			
	Input current(Max)	6A/115VAC,3A/230VAC			
	No-load power consumption(Max)	<2W			
	Inrush current(Max)	Cold start: 30A/120VAC,60A240VAC			
	Leakage current(Max)	0.25mA/240VAC			
Protection	Input undervoltage protection	60-85VAC			
	Output overcurrent protection	110%-180% of the rated output current, hiccup mode, auto-recovery			
	Output overvoltage protection	110%-125% of rated output voltage, output shut down, auto-recovery after restart			
	Output short-circuit protection	Hiccup mode, auto-recovery after short is removed			
	Overtemperature protection	Primary	Output shuts off, automatic recovery after temperature decreases		
Secondary		turn off output; when the temperature decreases, restart to restore operation			
Environmental Parameters	Operating temperature & Humidity	-25~+70°C,20%~90%RH non-condensing(refer to temperature derating curve for use)			
	Storage temperature & Humidity	-40~+85°C,10%-95%RH			
	Temperature coefficient	±0.03%/°C			
Safety EMC	Safety standards	MEET IEC62368,GB4943.1			
	EMC	CISPR32/EN55032 CLASS B,EN61000-4-2/3/4/6 CLASS B			
	Lightning surge protection	IEC/EN61000-4-5,line to line ±2KV,line to ground ±2KV			
	Withstand voltage	IVP-O/P:3750VAC,I/P-FG:1500VAC,O/P-FG:500V			
	Insulation resistance	I/P-O/P,I/P-FG,O/P-FG: >100M Ohm/500VDC			
Other	Fan Auxiliary Power	Voltage: 4V ±15%, current: 0.3A(voltage changes proportionally with output voltage adjustment)			
	Remote sense	When RS+ and RS- are connected to the client, they provide remote voltage compensation. If remote voltage compensation is not required, RS+ and RS- should be left floating and must not be shorted.			
	Dimensions	L×W×H: 127×76.2×40mm			
	Weight	480 ±20g			
Notes	1. *Unless otherwise specified, all typical values are measured at 230VAC and 25°C. 2. *Ripple and noise testing method: connect a 0.1μF ceramic capacitor and a 47μF electrolytic capacitor in parallel at the output, using an oscilloscope with a 20MHz bandwidth.				

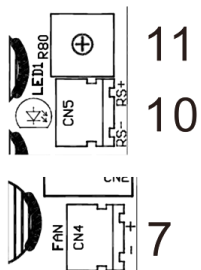
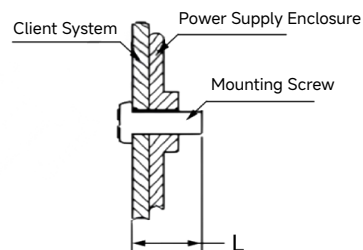
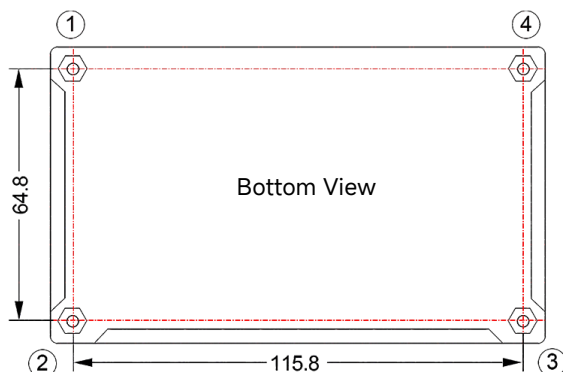
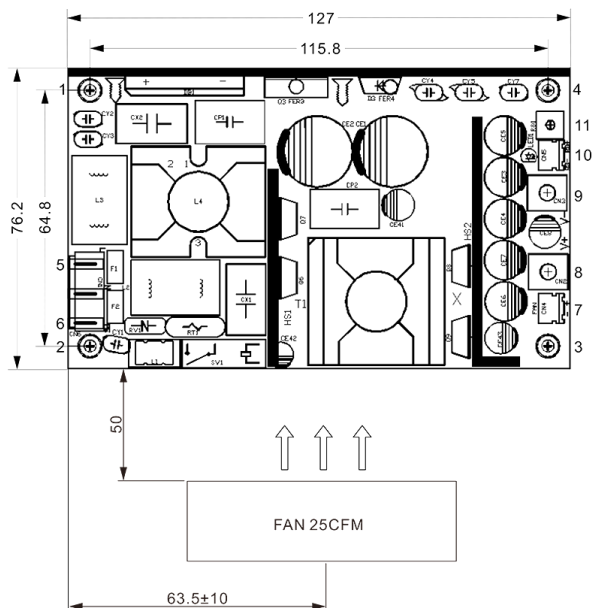
Product Characteristic Curve



Note: For input voltage 85-115VAC, the input voltage should be derated based on the temperature derating.



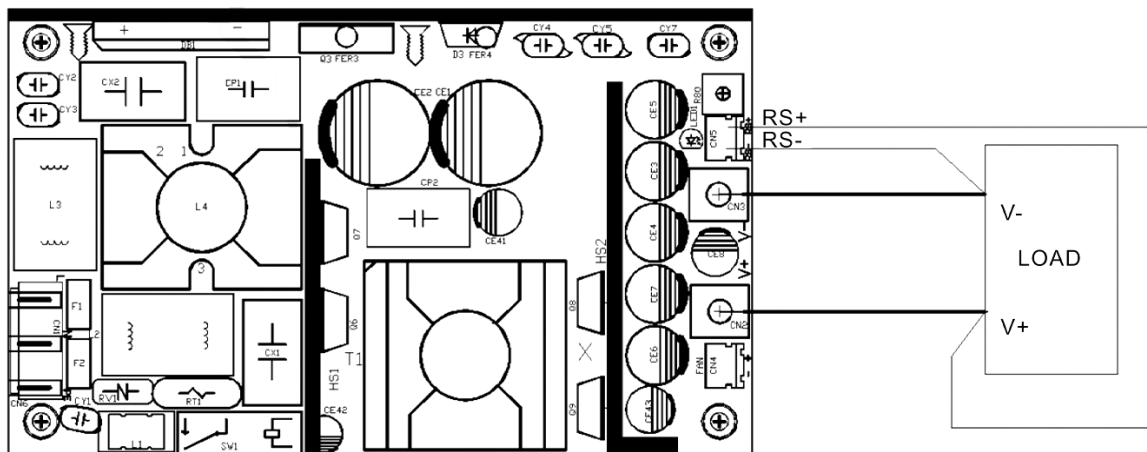
Mechanical Dimensions



No.	Function	Client Connector
1,2,3,4	Mounting Hole Position	M3 screw, bottom mount
5	Input Terminal	JST SVH-21T-P1.1 or equivalent
6	Ground Terminal	JST SPS-21T-250 or equivalent
7	Fan Terminal	XH2.54-2P male connector or equivalent
8	Output Positive	
9	Output Negative	
10	Remote Sensing Terminal	XH2.54-2P male connector or equivalent

Mounting position	Screw specification	L (recommended)	Torque (Max)
①~④	M3	2MM	0.4N·m

Additional Aluminum Plate Installation Instructions: To comply with the derating curve, under natural cooling conditions, the power supply must be installed on an aluminum plate (or a chassis with an equivalent surface area). Aluminum Plate Specifications: 300 × 300 × 2 mm.
Heat Dissipation Optimization: The surface of the aluminum plate must be smooth or coated with thermal grease to enhance heat conduction. The power supply must be mounted tightly against the aluminum plate, positioned at the center of the plate.



Notes:

- RS+ and RS- must not be shorted or connected in reverse, as this will damage the power supply.
- When using remote sensing, ensure that the wire voltage drop includes the voltage drop of both positive and negative output terminals. This voltage drop should not exceed 1V. To reduce voltage drop, use thicker or shorter cables as necessary.
- If remote sensing is not used, the signal terminals must be connected using dual wires to the load to maintain proper functionality.



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 can be obtained from your city or communal administration. If the old electrical or electronic device contains personal data, you are responsible for deleting it before you return it. Further information: www.elektrogesetz.de