

Product Brief

Product Features & Pictures

1. Electrical performance index

- a) Input characteristics
- b) Output characteristics
- c) Protective function

2. Insulation and safety specifications

- a. Dielectric strength
- b. Insulation resistance
- c. Safety certification

3. Electromagnetic compatibility

- a. Electromagnetic interference
- b. Electromagnetic immunity

4. Use environment

- a. Operating temperature
- b. Storage temperature
- c. Working humidity
- d. Storage humidity
- e. Altitude
- f. Cooling method

5. Environmental experiments and reliability requirements

6. Mechanical structure

7. Attached table

Features:

This product (PoE – 4805) is a special injector designed for network communication equipment;

- Small output ripple,
- High working efficiency of 90-264VAC wide voltage input;
- Small size, stable operation, high reliability, etc .;
- With output overcurrent, overpower, short circuit protection, etc Features.



1. Electrical performance index:

1.1 Input characteristics				
Serial number	Item	skills requirement	Unit	Remark
1.1.1	Rated input voltage	100-240	Vac	
1.1.2	PF value	/		Full load
1.1.3	Input voltage range	90-264	Vac	frequency: 47-63Hz
1.1.4	Starting inrush current	≤5	A	Vin=115/230Vac,Cold state
1.1.5	Input current	≤0.4	A	Vin=115/230Vac
1.1.6	Efficiency (typical)	90%		Vin=230vac, Full load
1.1.7	Standby power consumption	≤0.5	W	No-load power consumption
1.2 Output characteristics				
Serial number	Item	skills requirement	Unit	Remark
1.2.1	Output rated voltage	48	Vdc	
1.2.2	Output voltage range	48.5-49.6	Vdc	
1.2.3	Output rated current	0.5	A	
1.2.4	Output minimum current	0	A	
1.2.5	Peak output current	0.65	A	
1.2.6	Load Regulation	±3%		
1.2.7	Linear adjustment	±1%		
1.2.8	Output start / rise time	Start time≤3s, Rise Time 50ms		
1.2.9	Hold time	16ms(230Vac)/16ms(115Vac)		Full load
1.2.10	Output ripple and noise	≤150	mVp-p	Limited bandwidth of 20MHz, 104 + 47μF capacitor at the load end
1.2.11	Overshoot amplitude on and off	±10%		
1.2.12	Dynami c Respon se	Overshoot amplitude	±5%	25%—50%—25% or 50%—75%—50% Load change
		Recovery Time	Δt≤200	
1.3 Protection characteristics				
Serial number	Item	skills requirement	Unit	Remark
1.3.1	Input undervoltage protection	Protection point	/	Vac

1.3.2	Output current limit / power protection	Protection point	1.1-2 times the rated output	A/W	Hiccup-type protection, automatic recovery after normal load
1.3.3	Output short circuit protection	The short-circuit protection mode is hiccup restart mode. The power supply will automatically resume normal operation after the short-circuit fault is removed.			
1.3.4	Over temperature protection	/			

2. Insulation and safety specifications

Serial number	Item		Standard (or test conditions)	Remark
2.1	Dielectric strength	Input and output	3KVac/5mA/1min	No flashover, no breakdown
		Input and earth	/	
		Output and Earth	/	
2.2	Insulation resistance	Input and output	$\geq 10M\Omega @ 500Vdc$	At ambient temperature 15—40°C, Relative humidity is $\leq 90\%$
2.3	Reference safety standards	EN60950-1, GB4943 Other safety standards		

3. Electromagnetic compatibility

Serial number	Item		Standard (or test conditions)	Remark
3.1	EMI	Radiation disturbance emission	CLASS B	EN55022
		Conducted disturbance emission	CLASS B	EN55022
3.2	EMS	ESD immunity	Air discharge 8KV, contact discharge 6KV, criterion A (system)	IEC61000-4-2
		Electrical fast burst immunity	LEVEL 4 Criterion: A (system)	IEC61000-4-4

	Surge immunity	LEVEL 4 Criterion: A (system)	IEC61000-4-5
	Voltage sag, short-term interruption, and slowly varying immunity	Select by standard	IEC61000-4-29

4. Use environment

Serial number	Item	Technical index	Unit	Remark
4.1	Operating temperature	-15~+55	°C	Typical value 25°C
4.2	Storage temperature	-40~+85	°C	Typical value 25°C
4.3	Working humidity	20~90% (Frost-free)		
4.4	Storage humidity	10~90% (Frost-free)		
4.5	Altitude	≤2000	m	normal work
4.6	Cooling method	Free cooling		

5. Environmental experiments and reliability requirements

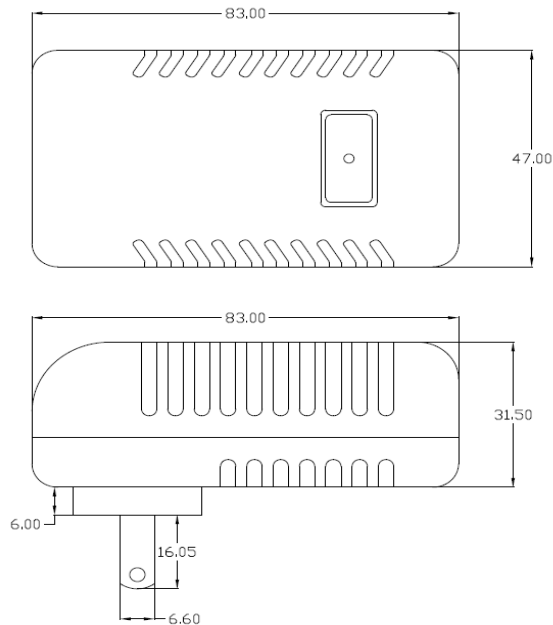
Serial number	Item	Technical index	Remark
5.1	Hot temperature work	+55°C 8hrs	
5.2	Low temperature work	-15°C 8hrs	
5.3	High temperature storage	+70°C 24hrs	
5.4	Cryogenic storage	-25°C 24hrs	
5.5	Constant Damp Heat Test	/	
5.6	High and low temperature cycle test	/	
5.7	Design MTBF	≥30000Hrs MIL-HDBK-217F (25)	Ambient temperature 25 ° C and average trouble-free working time under rated input and full load conditions

6. Mechanical structure

Serial number	Item	skills requirement	Unit	Remark
6.1	Dimensions	83*47*53.5 ±1 (L *W * H)	mm	(L *W * H)
6.2	Structural dimension drawing	See attached picture 1		
6.3	Terminal definition	See Schedule 1		
6.4	Special processing	/		
6.5	Product accessories	/		
6.6	package	Air bubble bag		Cardboard with knife thickened and hardened

7.Attached table

Figure 1 **Structural dimension drawing**



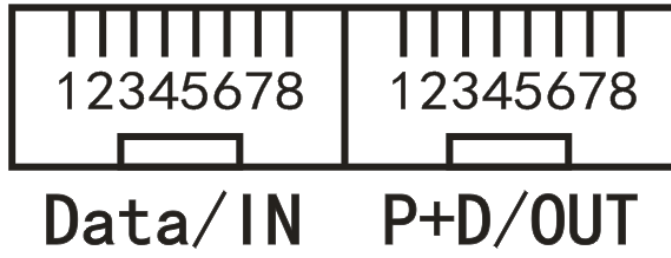
Schedule 1 **Terminal definition**

Schedule 1-1 AC input terminal function definition:

Terminal name	Function definition	Remark
US/EU/UK plug	AC input	

Schedule 1-2 DC output terminal function definition:

Terminal name	Function definition	Remark
8Pin Network port *2	P+D/OUT: 4,5/48V; 7,8/GND;	Yellow network port



Note: The final product is based on the physical production.