Product Specifications

Product Name: **POE Gigabit Injector**

Product No.: **WAP-PSE-1000**

Version: **V1.1**

1. Product Overview

BDCOM WAP-PSE-1000 is a single-path POE Injector introduced by BDCOM. It supports 90-264VAC input and -48V POE output. It is contact in size. It is contact in size. It is contact in size. It is characterized by high-efficiency, strong stability and high-reliability. It supports output current and short-circuit protection, which provides with security protection for PD device.

2. Electrical Specifications:

2.1	Input Characteristics			
No.	**Item**	**Technical Requirements**	**Unit**	**Notes**
2.1.1	Input Rated Voltage	100—240	Vac	
2.1.2	Input Voltage Range	90—264	Vac	
2.1.3	AC Input Voltage Frequency	47—63	Hz	typical value 50/60Hz
2.1.4	Inrush Current	≤60	A	Vin=240Vac,cold state
2.1.5	Max Input Current	≤0.75	A	Vin=90Vac
2.1.6	PF Value	≥0.60		rated input ， rated load
2.1.7	No-Load Loss	≤2	W	rated input ， rated load
2.1.8	Efficacy	≥80%		rated input ， rated load
2.2	**Output Characteristics**			
No.	**Item**	**Technical Requirements**	**Unit**	**Notes**
2.2.1	Output Rated Voltage	53	Vdc	
2.2.2	Output Voltage Range	53±5%	Vdc	
2.2.3	Output Rated Current	0.6	A	
2.2.4	Output Minimum Current	0	A	
2.2.5	Output Peak Current	0.6	A	
2.2.6	Rated Output Power	31	W	

2.2.7	Load Regulation		±3%		
2.2.8	Line Regulation		≤±1	%	
2.2.9	Max Capacitive Load		500	uF	
2.2.10	No-Load Voltage Change △V		≤0.1	V	
2.2.11	Rise Time		≤20	ms	rated input ， rated load
2.2.12	Startup Time		≤3	S	rated input ， rated load
2.2.13	Holdup Time		≥10	mS	rated input ， rated load
2.2.14	Ouput Ripple and Noise		≤200	mVp-p	restricted bandwidth 20MHz, the load end combining with 0.1μF and 10μF electrolytic capacitor
2.2.15	On and Off Overshoot Amplitude		±10%		
2.2.16	Dynamic Response	Overshoot Amplitude	±5%		30%—90%—30% load change ， frequency ≤1K
		Recovery Time	200	us	

2.3	**Protection Characteristics**				
No.	**Item**	**Technical Requirements**		**Unit**	**Notes**
2.3.1	Output Overcurrent Protection	Protection Point	0.70-0.85	A	Hiccup restart-up, recover after the default is removed
2.3.2	Output Short-Circuit Protection	Hiccup restart-up, recover after the default is removed			

3. Insulation and Security Specifications

No.	Item		Standards(or test conditions)	Notes
3.1	Dielectric Strength	input and output	2000Vac/10mA/1min	no-flashover, no-breakdown
3.2	Insulation Resistance	input and output	≥50MΩ@500Vdc	normal temperature and humidity
3.3	Steady Damp-Heat Dielectric Strength	input and output	≥2MΩ@500Vdc	temperature: +40℃±2℃ humidity: 93%±3%

4. EMC and Thunder-Proof

No.	Item	Standards(or Test Conditions)
4.1	Conducted Interference	EN55022 CLASS A (power system indicater)
4.2	Radiated Interference	EN55022 CLASS B (power system indicater)
4.3	ESD	Shell, in normal operation your hands can touch following parts: IEC61000-4-2; contact discharge ±6KV; air discharge ±8KV; evidence A: charging when test
		Shell, in normal operation your hands can touch following parts: IEC61000-4-2; contact discharge ±8KV; air discharge ±10KV; evidence A: charging when test
		Signal interface conductor: IEC61000-4-2; contact discharge ±2KV; evidence A; charging when test
4.4	Conducted Immunity	IEC61000-4-6 LEVEL3 evidence A (system) IEC61000-4-6 LEVEL3 evidence A (System)
4.5	Radiated Susceptibility	IEC61000-4-3 LEVEL3 evidence A (system)
4.6	EFT	IEC61000-4-4 LEVEL2 evidence A (system)
4.7	Surge	IEC61000-4-5 LEVEL4 evidence A (system) (difference module 2KV, common mode 4KV)
4.8	Voltage Drop And Short-Circuit Interruption (220Vac)	IEC61000-4-11 drops to 70%U, the lasting time is 100ms; drops to 0%U, the lasting time is 0%U; the lasting time is 10ms, meet the requirements of evidence A in 0°, 45°,90°,135°,180°,225°,270°and 315.
4.9	Harmonic Current	IEC61000-3-2 (6) CLASS A
4.10	Thunder-Proof	The AC input can bear no less than 5KA, 8/20us surge current waveform, positive and negative 5 times respectively, once/every other minute

5. Operating Environment

No.	Item	Technical Specifications	Unit	Notes
5.1	Operating Temperature	0－40	℃	typical value 25℃
5.2	Storage Temperature	-10—+70	℃	typical value 25℃
5.3	Operating Humidity	20－90% (non-condensing)		
5.4	Storage Humidity	10 ~95% (non-condensing)		
5.5	Altitude	≤3000	m	Normal operation
5.6	Cooling	natural heat dissipation		

6. Environment Experiment and Reliability Requirements

No.	Item	Technical Specifications	Notes
6.1.1	Work in the high	40℃ 8hrs	standard

	temperature		
6.1.2	Work in the common temperature	+25℃ 8hrs	standard
6.1.3	Work in the low temperature	0℃ 8hrs	standard
6.1.4	Storage in the high temperature	70℃ 24hrs	standard
6.1.5	Storage in the low temperature	-10℃ 24hrs	standard
6.1.6	High/low temperature cyclic test		standard
6.1.7	MTBF	30000h	typical value 25℃， rated input, in condition of full load
6.1.8	Vibration Test	2-9HZ displacement amplitude 3MM; 9-200HZ acceleration amplitude 1g; 200-500HZ acceleration amplitude 1.5g; Three directions with five cyclic tests respectively	standard
6.1.9	Impulse Test	The lasting time 11ms, the peak value acceleration is 100m/s2, 20 times respectively in three directions	standard

7. Mechanical Structure

No.	Item	Technical Requirements	Unit	Notes
7.1	Dimensions	137*62*32 ±1 (L * W * H)	mm	(L * W * H)
7.2	Weight	0.30	KG	
7.3	Input Slot Type	National standard with triplex receptacle(with power line)		
7.4	Output Interface Type	RJ45 port	MM	
7.5	Package	Universal package		