

### **Indoor LED Power Supply**



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#### **Features:**

- . European AC input 200-240VAC.
- . Built-in active PFC function.
- . IP20.
- . Suitable for dry environment.
- . Protections: Short circuit / Over temperature / Over voltage.
- . Adopt plastic case and internal glue potting.
- . Built-in lightning protection device,
  - can meet the requirements 1kV.
- . Comply with the world lighting equipment safety standards.
- . 5 years warranty.

#### **Description**:

SNP100 series is an indoor constant voltage LED driver with an input voltage range of 180-264Vac, whose efficiency is up to 93%, fan-less design, working in the temperature range of-20°C to +45°C under free air convection. It has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, with all-round protection functions, which not only greatly improves the reliability of the product, but also ensures the life cycle of product, suitable for almost kinds of indoor applications where LED lamps can be installed. The product designed completely in accordance with world's lighting equipment safety regulations to ensure the safety of both user and luminaire system during installation.

#### Model:

Model	Output voltage	Output current	Max. Output power	Output current precision	Total harmonic distortion (Typ.)	Power factor (Typ.)	Efficiency (Typ.)
SNP100-12VF-2	12V	0-8.33A	100W	±1%	16%	0.97	92%
SNP100-24VF-2	24V	0-4.17A	100W	±1%	16%	0.97	93%

**Remark:** All the parameters are measured at 230VAC input, full load and 25  $^{\circ}$ C of ambient temperature if not specially mentioned.

1



# Indoor LED Power Supply

### Input:

Parameter	Min. value	Typical value	Max. value	Note
Rated input	200 Vac		240Vac	Derating curve is shown in
voltage				figure
Input voltage	180 Vac		264Vac	5
Input frequency	47Hz		63Hz	
Max. Input			0.6A	
current				
Input inrush			90A	230Vac/50Hz, Cold Start
current				
Power factor	0.95	0.97		230Vac,Full Load
Total harmonic		16%	18%	230Vac,Full Load
input				
Leakage current			0.7mA	230Vac/50Hz,Full Load
Stand-by power		0.4W	0.5W	230Vac/50Hz,No Load
consumption				

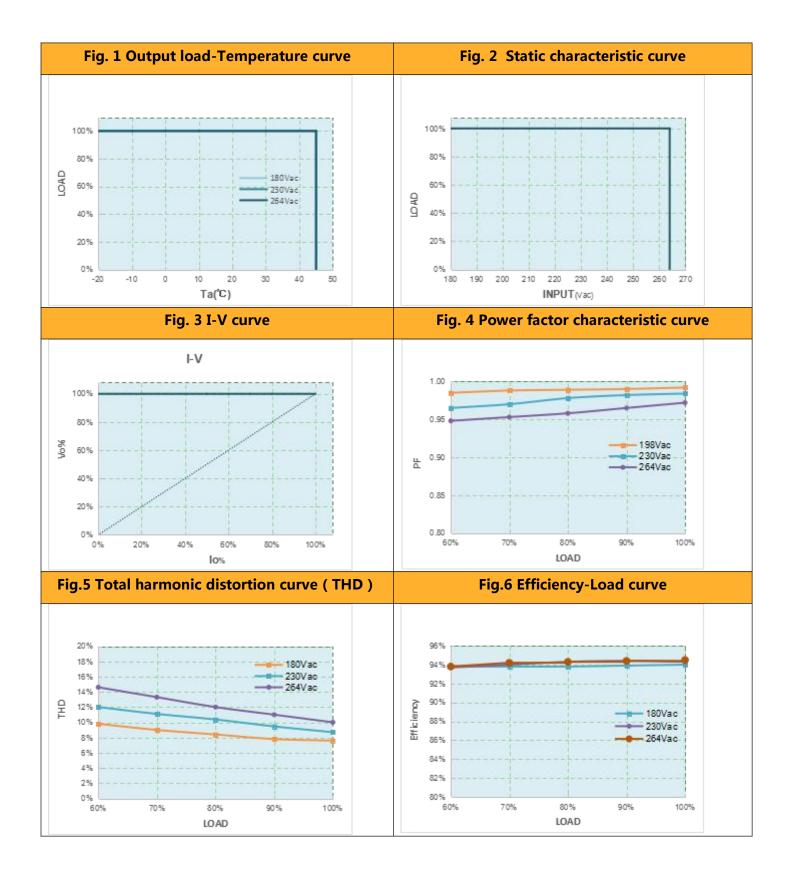
## Output:

Parameter	SNP100-12VF-2	SNP100-24VF-2	Note	
Output voltage	12.0VDC	24.0VDC	The max.output power must meet the	
			requirements Po=Vo*Io=100W	
Rated output current	8.33A	4.17A		
Output current	0-8.33A	0-4.17A		
Rated output power	100W	100W		
Rated output efficiency	92%	93%	230Vac	
Output voltage precision	±1%			
Output voltage ripple ( PK-	±3%		Full load (Test under 20M	
PK )			bandwidth)	
Output current ripple ( PK-			Full load (Test under 20M	
РК )			bandwidth)	
Rise time	100mS		230Vac	
Startup time	Startup time 300		230Vac	
Line regulation	±	1%	full load	
Load regulation	±1%			



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#### Characteristic Curve:





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#### **Protection:**

Parameter		Conditions	Note	
Over load		1.1-1.6 times rated load	Auto-recovery after	
			overload removed.	
	Short circuit	Short circuit power≤0.5W	Hiccup mode, auto-	
			recovery after short circuit	
			removed.	
Protection	Over voltage	1.5 times of rated output voltage	Turn off the input voltage	
rocection			and recover after restart.	
	Over	110 °C	Turn off the input voltage,	
	temperature		the temperature can be	
			restored after return to	
			normal.	

### **Environment Requirement:**

Parameter	Min.	Тур.	Max.	Note
Working temp.	-20°C	25°C	+45°C	See Fig.2
Storage temp.	-40°C	25°C	+85°C	
Working humidity	10%RH		90%RH	
Storage humidity	5%RH		95%RH	
IP grade			IP20	
Cooling mode	Natural cooling			

**Remark:** All the parameters are measured at 25 °C of ambient temperature if they are not specially mentioned.



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# Safety&EMC standard:

Certificate		Safety standards	Certification	Note	
UL/CUL					
TUV		EN61347-1:2015			
		EN 61347-2-13:2014+A1			
		EN62493:2015	$\checkmark$		
SAA		AS/NZS			
		61347.2.13			
ССС					
CE		EN 61347-2-13:2014 +A1	$\checkmark$		
CE		EN61347-1:2015	V		
Safety	test	Qualification	Note		
	Input to	3750Vac/5mA Max/60s	Reinforced insulation, no breakdown, n		
	output		flashov	flashover	
Dielectric	Primary to		Basic insulation,no breakdown, no flashover Functional insulation, no breakdown, n		
compressive	ground				
strength	Secondary				
	to ground		flashover		
Insulation	Input to	≥10MΩ	Test voltage :	500Vdc	
resistance	output				
Grounding resistance			25A/1min		
Leakage current		≤0.75mA	264Vac		
EMI/EMS item		Standard/Level	Data		
Conduction CE		EN55015			
Radiation RE		EN55015			
Harmonics		EN IEC 61000-3-2	Class C		

#### Others:

Parameters	Condition	note
Lifetime	30,000 hours	230Vac,full load, case Temp. 75℃
MTBF	200,000 hours	230Vac,full load, environment Temp. 25°C (MIL-HDBK-217F)
ТС	90°C	
Warranty	5 years	
Weight	520 g	
Dimensions	177mm * 56.4mm * 17.2mm	L x W x H

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## Mechanical Specification (Unit : mm)

