



The USP-30PFN-12DN is a compact and reliable switching power supply, delivering a stable 12V DC output with an accuracy of  $\pm 2\%$ . Designed to handle a rated current of 2A and a maximum output power of 24W, this power supply is ideal for a range of low-to-medium power industrial and electronic applications. Its compact size ensures easy integration into space-constrained setups without compromising performance.

#### Key Features:

- **Stable Voltage Output** – 12V DC  $\pm 2\%$  Accuracy  
Delivers consistent and precise power for critical applications.
- **Versatile Current Range** – 0~2A  
Handles a variety of load requirements, ensuring flexibility in use.
- **Compact Dimensions** – Slim & Efficient Design  
Ideal for installations where space is at a premium.
- **Reliable Power Output** – 24W Capacity  
Provides efficient power delivery for small-to-medium power needs.
- **Durable Build for Long-Term Use**  
Engineered for consistent performance in industrial and electronic environments.

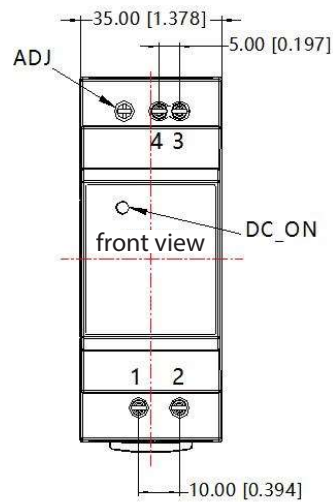
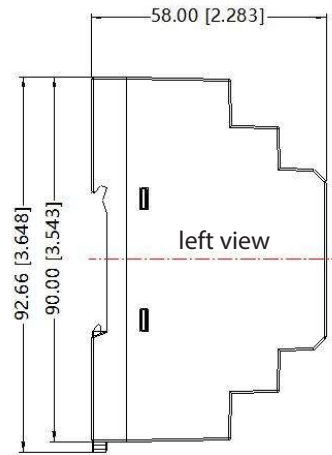
#### Notes

1. If not specified, all parameters are measured at  $T_a = 25^\circ\text{C}$ , humidity  $< 75\% \text{ RH}$ , rated input voltage and rated output load.
2. To improve the conversion efficiency. When the module is higher than the operating voltage, there may be some audio noise, but not affecting the product performance and reliability.
3. When the product terminal is used, the shell should be connected to the ground.
4. The test method for ripple and noise adopts the proximity test method, with a 47 $\mu\text{F}$  electrolytic capacitor and a 0.1 $\mu\text{F}$  ceramic capacitor connected in parallel at the output.
5. The power supply shall be regarded as a part of the system components, and all EMC tests shall be confirmed in combination with the terminal equipment.

## Electrical specifications

	Type	USP-30PFN-12DN
Output	DC output voltage	12V
	Output voltage accuracy	$\pm 2\%$
	Rated output current	2A
	Output current range	0-2A
	Output power	24W
	Ripple and noise	120mVp-p
	DC voltage adjustable	10.8~13.8V
	Power-down hold time	12ms/115VAC, 60ms/230VAC
Input	Input voltage range	85~264VAC / 127~370VDC
	AC input current	0.9A/115VAC/0.5A/230VAC
	Efficiency	88%
	Impact current	25A/115VAC 45A/230VAC(cold boot)
	Leakage current	$< 0.5\text{mA}/240\text{VAC}$
Protection Feature	Short-circuit protection	Hiccup protection: After the short-circuit state disappears, the recovery time is 3 seconds. It can provide long-term short-circuit protection and self-recovery
	Overcurrent protection	$\geq 120\% I_o$ , self-recoverable after the load condition is removed (230VAC, rated load)
	Overvoltage protection	$\leq 16\text{V}$ (Output voltage clamping or hiccups)
Environment	Operating temperature and humidity	$-40^\circ\text{C} \sim +70^\circ\text{C}$ ; 20%~90%RH No condensation (Please refer to the "Reduction Curve").
	Storage temperature and humidity	$-40^\circ\text{C} \sim +85^\circ\text{C}$ ; 10%~95%RH No condensation
Safe	Pressure resistance	I/P-O/P: 4KVAC
	Insulation resistance	I/P-O/P: 100M $\Omega$ Ohms/500VDC/25 $^\circ\text{C}$ /70%RH
Standard	Safety standards	Meet IS13252(Part1)&EN62368-1, UL/IEC62368-1
General Data	Size	92.66*35*58mm
	Package	0.115kg

## Institutional size



PIN Mode	
PIN	LI30-20B
1	AC(N)
2	AC(L)
3	-Vo
4	+Vo

Note:

Unit size: mm [inch]

ADJ: Output adjustable resistance

Crimping range: 24-12 AWG

Tightening torque: Max.0.4 N. m

## Reduction curve

