



The USP-480MFA-24DN is a high-performance switching power supply designed for industrial applications requiring reliable and efficient power. Delivering a stable 24V DC output with an adjustable range of 24-48V, this power supply provides a rated current of 20A and a maximum output power of 480W. With the ability to accept both AC and DC input voltages and a remarkable efficiency rating of 94.5%, this power supply is ideal for demanding environments that prioritize energy efficiency and performance.

Key Features:

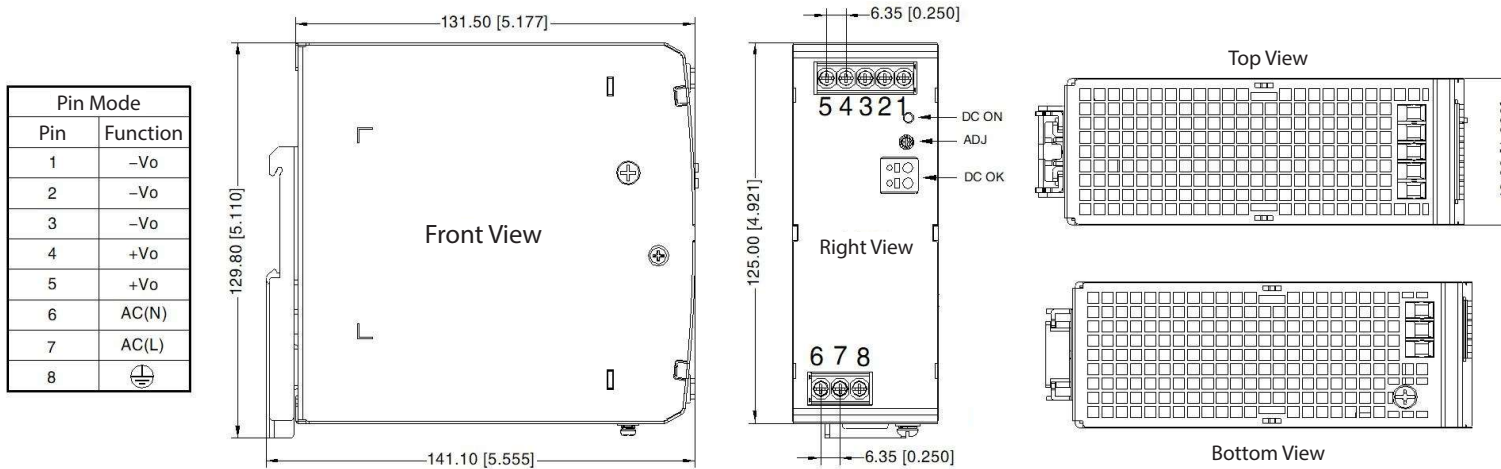
- **High Power Output – 480W Capacity**
Delivers stable power for high-demand industrial applications.
- **Wide Input Compatibility – AC/DC Input Voltage**
Flexible input options ensure compatibility with various setups.
- **Adjustable Voltage Range – 24V to 48V DC**
Allows fine-tuning of the output voltage to meet specific system requirements.
- **High Efficiency – 94.5%**
Minimizes energy loss, reducing operational costs and heat generation.
- **Rugged and Reliable Design**
Built to perform in challenging industrial environments, ensuring long-term reliability.

Notes

1. If not specified, all parameters are measured at Ta=25°C, humidity <75% 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. After scrapping, our products shall be stored according to ISO 14001 and relevant environmental laws and regulations, and be handled by qualified units.
5. The output voltage can be adjusted by the output adjustable resistance ADJ and raised in aclockwise direction.
6. When the altitude exceeds 2000 meters(6500 inches),the temperature drops by 5°C/1000m.

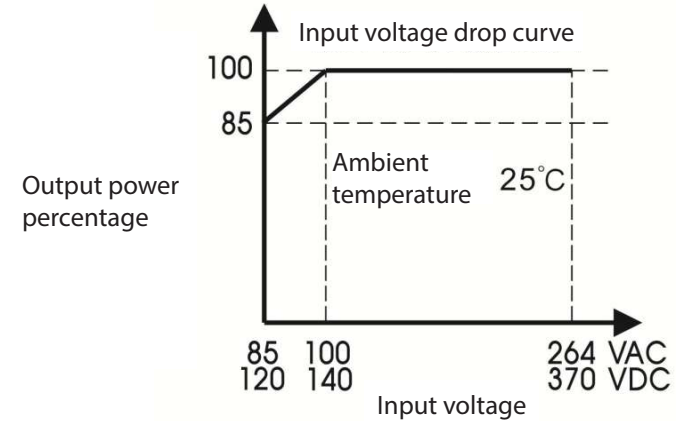
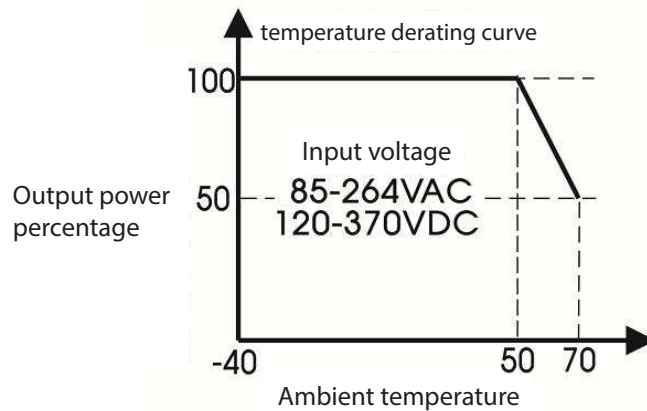
Electrical specifications

	Type	USP-480MFA-24DN	USP-480MFA-48DN
Output	DC output voltage	24V	48V
	Output voltage accuracy	±1%	±1%
	Rated output current	20A	10A
	Output current range	0-20A	0-10A
	Output power	480W	480W
	Ripple and noise	50mVp-p	70mVp-p
	DC voltage adjustable	24~28V	48~55V
	Keep the power off for time	22ms/230VAC	
	DC OK	30VDC/1A	
Input	Input voltage range	85~264VAC/120~370VDC	
	AC input current	5A/115VAC,2.5A/230VAC	
	Efficiency	94.5%	94.5%
	Impact current	15A/115VAC,15A/230VAC (cold boot)	
	Leakage current	<1mA/264VAC	
Protection Feature	Short-circuit protection	After the short circuit state disappears,the recovery time is 10s, constant current type, constant-current operation 1s,turn it off for 10 seconds can be long-term short circuit protection, self-recovery	
	Overcurrent protection	150%Io,keep working for one second output off,self-recovered after load condition removal (230VAC, rated load)	
	Overvoltage protection	29-35v,eruct	56-60v,eruct
	Overtemperature protection	Overtemperature protection starts at 90°C,overtemperature protection releases at 60°C(230VAC, rated load)	
Environment	Operating temperature and humidity	-40 ~+70 ; 20%~90%RH (See the reduction curve for no condensation)	
	Storage temperature and humidity	-40°C~+85°C;10%~95%RH	
Safe	Pressure resistance	I/P-O/P: 3KVAC I/P-FG: 2KVAC O/P-FG: 0.5KVAC	
	Insulation resistance	I/P-O/P,I/P-FG,O/P-FG:100MΩ Ohms/500VDC/25°C/70%RH	
Standard	Safety standards	Meet IS13252(Part1)& EN62368-1,IEC/UL62368-1,UL61010-1 standard	
General Data	Size	131.5*48*125mm	
	Package	0.98kg	



Note:
Unit size: mm [inch]
DC ON: Output status light
ADJ: Output adjustable resistance
Crimping range: input: 20-10 AWG
output: 24V: 14-10AWG
48V: 18-10AWG
DC OK: 24-16AWG
tightening torque: Max. 0.79N.m
Rail type: TS35, rails need to be grounded
Unmarked tolerance: $\pm 1.00 [\pm 0.039]$

Product Characteristic Curve



Note:

- 1.If the input voltage is 85-100VAC/120-140VDC,the input voltage derates based on the temperature derating.
- 2.This product is suitable for use in natural air cooling environment,if use in a closed environment, please consult our FAE.