

DCP-24x12-20A-WP-M1

Encapsulated DC to DC Converter - 24V DC to 12V DC - 20 Amps - Waterproof

Product ID: 339048

Please see last page for supporting documentation for this product (certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Image: DCP-24x12-20A-WP-M1

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

DCP-24x12-20A-WP-M1 DC to DC Converter

Line In Voltage: 24V DC

Line Out Voltage: 12V DC @ 20 Amps

Watts: 240

DC Input Connector: 6" Pigtail, Flying Leads

DC Output Connector: 6" Pigtail, Flying Leads

Voltage Accuracy: +/- 1.5%

Output Frequency: 43 KHz

Line-In Regulation: +/- 0.2%

Line-Out Regulation: +/- 0.2%

Temperature Coefficient: +/- 0.03% /°C

Protection: Short Circuit/Overload/Overvoltage

Operating Temp: -10°C to +60°C

Efficiency: 95%

Dimensions: 3"-L x 3"-W x 1.25"-H

Mounting: (2) Side Located Thru-Holes

Weight: 0.75 lb

Features

IP68 Rated Waterproof

Overload, Short Circuit, and Overvoltage Protection

International Lighting Safety Standards Compliant

Suitable For LED Moving Signs

Suitable For Wet or Damp Locations

Made in the USA

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671

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The Larson Electronics DCP-24x12-20A-WP-M1 Waterproof DC to DC Converter converts 24V DC electrical voltage to 12V DC at 20 amps max. This converter includes

flying leads to hardwire this unit inline. This unit takes 24 volts DC and increases it to 12 volts DC, allowing users to use 240W power to operate equipment like our LED light bars and Golights that require 12 volts DC voltage.

The DCP-24x12-20A-WP-M1 240 watt power converter provides a safe and effective way for users to tap into and utilize 24 Volt DC power sources and step down this voltage to 12 Volts DC for use with equipment that requires 12V DC electrical power. This unit can be operated with a 24V DC input voltage and will output 12 Volt DC voltage to power lights and equipment up to 240 watts and 20 amps at 12V DC. This power converter features an encapsulated IP68 waterproof design, making it suitable for indoor or outdoor use and is wet-damp area approved. This converter includes integral short circuit, over voltage, and overload protection that will shut down the unit or reduce output in case of faults and overloads to protect the unit and connected equipment from damage.

The small size and wide input voltage range of this unit make it ideal for indoor-outdoor operation of Larson Electronics LED light bars, Golights and other equipment that requires 12V DC voltage in locations where 24 volt DC power is readily available.

This converter is equipped with two 6" wires on the input side and a USB-C port on the output side. All leads are stripped and tinned for equipment installation.

Features: The DCP-24x12-20A-WP-M1 converter features full range, universal DC input capability and can be operated with 24 volts DC. The unit converts this DC power input to 240 watt, 20 Amp 12VDC. IP68 rated, this unit is waterproof, wet and damp area approved and suitable for indoor or outdoor applications. Integrally designed protection includes overload, short circuit, and over voltage safeguards to prevent overheating and unit damage in case of faults or overly heavy current draw. This unit will limit current when an overcurrent condition is encountered and recover when the condition is removed. This unit will enter hiccup mode under short circuit conditions and recover when the fault is removed.

This converter is enclosed in a cast aluminum housing for heat distribution. All electronic components are encapsulated within the housing. This power converter has a -10°C to +60°C operating temperature range. This unit has a 95% conversion efficiency and is suitable for use with moving LED signs and similar LED equipment. These units have a fixed switching frequency at 43KHz.

NOTE: In order to obtain the best performance and the longest operational life from these units, it is recommended that you do not exceed 75% of the unit's output amperage. To determine if this converter suits your desired application, add together the total wattage of the equipment you intend to use with this unit and divide this total by 24 volts to find the total amperage draw that will be placed upon the converter. For example, if you are using two of our LEDP10W-240E 240 watt LED lights, 240 watts divided by 24 volts is 10 amps. This would mean the DCP-16-DP is well suited as it would run at under 75% capacity to produce the necessary 10 amps. Running these units at 100% of their capacity can create excess heat and lead to shortened converter life.



Frequently Asked Questions (FAQ)

There are no Fags



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Export Control Classification Number (ECCN): EAR99



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- **HigResPic1**(<https://www.larsonelectronics.com/images/product/HigResPic1/339048.JPG>)
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