Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

DCP-12x24-20A-WP

Encapsulated DC to DC Step Up Transformer - 12V DC to 24V DC - 20 Amps - Flying Leads - Waterproof

Product ID: 154331

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



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-12x24-20A-WP - DC to DC Step-Up Transformer

Line In Voltage: 12V DC
Line Out Voltage: 24V DC @ 20 Amps
Watts: 480
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/ Over Voltage
Recommended Primary Fuse: 45A
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 Lbs

DCP-12x24-20A-WP Features

IP68 Rated Waterproof
Overload, Short Circuit, Over Voltage Protection
International Lighting Safety Standards Compliant
Suitable For LED Moving Signs
Suitable For Wet or Damp Locations

Special Orders - Special Requirements

Contact us for special requirements

Toll Free: 1-800-369-6671
Intl: 1-903-270-1187
Fax: 1-903-498-3364
E-mail: sales@larsonelectronics.com

The Larson Electronics DCP-12x24-20A-WP Waterproof DC to DC Step-down Transformer converts 12V DC electrical current to 24V DC at 20 amps max. This converter includes flying leads to hard wire this unit

inline. This unit takes 12 volts DC and increases it to 24 volts DC, allowing users to use 12 volt DC power to operate equipment like our LED light bars and Golights that require low voltage 24 volts DC current.

The DCP-12x24-20A-WP 480 watt power converter provides a safe and effective way for users to tap into and utilize 12 Volt DC power sources and step up this current to 24 Volts DC for use with equipment that requires 24V DC electrical power. This unit can be operated with input current ranging from 12V and will output 24 Volt DC current to power lights and equipment up to 480 watts and 20 amps at 24V 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 24V DC current in locations where 12 volt DC power is readily available.

This converter is equipped with two 6" wires on the input side and two 6" wires on the output side. All leads are stripped and tinned for equip installation.

Features: The DCP-12x24-20A-WP converter features full range, universal DC input capability and can be operated with 9 to 20 volts DC. The unit converts this DC power input to 480 watt, 20 Amp 24VDC. 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 over current condition is encountered and recovers when the condition is removed. This unit will enter hiccup mode under short circuit conditions and recover when the fault is removed. This transformer is enclosed 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-120E 120 watt LED lights, 120 watts divided by 12 volts is 5 amps. This would mean the DCP-16-DP is well suited as it would run at under 75% capacity to produce the necessary 5 amps. Running these units at 100% of their capacity can create excess heat and lead to shortened converter life.

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364

Frequently Asked Questions (FAQ)

Larson Electronics LLC
9419 E US HWY 175, Kemp, TX 75143
Phone: 800.369.6671

www.LarsonElectronics.com
Email: sales@LarsonElectronics.com
Fax: 903.498.3364



DCP-12x24-20A-WP

Product ID: 154331

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **CE Certificate**
- **MSDS (Material Safety Data Sheet**
- **Operations Manual**
- **RoHS Certificate (Restriction of Hazardous Substances)**
- **HigResPic1**
- **HigResPic2**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**