Larson Electronics LLC
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## DCP-25-DP

# Waterproof Transformer Converts 120-240V AC to 12/24 Volts DC - 25 Amp Max- Straight Blade Wall Plug

**Product ID: 50921**

**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-25-DP Power Converter**

**Line In Voltage: 100-277VAC @47~63 hz**

**Line Out:** 12VDC @ 25 Amps, 24VDC @ 12.5 Amps

**Watts: 256 Total**
**AC Input Connector:** 1` Pigtail, Straight Blade Plug
**DC Output Connector:** 1` Pigtail, 2 Pin Deutsch Connectors
**Protection:** Short Circuit/Overload/ Over Voltage/Over Temperature

**Mounting:** Two Screw Slide Notches

**Operating Temp:** -30 / +60C

**Efficiency:** 90%

**Dimensions:** 9.6"-L 2.5"-W 1.5"-D

**Weight:** 1 Lbs

**DCP-16-12V-DP Features**

IP67 Rated Waterproof
Overload, Short Circuit ,Over Voltage, Over Temperature Protection
UL1012 Compliant
UL60950-1 Compliant
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

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**The Larson Electronics DCP-25-DP Waterproof Power Supply converts commonly used 120-240VAC electrical current to 12VDC @25 Amps. This converter includes a typical straight blade plug on the input end and a 2 prong Deutsch connector on the output end. This unit takes voltages within the 100-277VAC range and reduces it to 12/24 VDC,**

**allowing users to use standard AC power to operate equipment like our LED light bars and HID Golights that require low voltage DC current.**

The DCP-25-DP 256 watt power converter provides a safe and effective way for users to tap into and utilize common 120 to 240 Volt AC power sources and convert this current to 12/24 Volts DC for use with equipment that requires 12/24 volt electrical power. This unit can be operated with input current ranging from 100 to 277 VAC and will output 256 watt 12 Volt DC current at 25 amps or 24 Volt DC at 12.5 amps. This power converter features an IP67 rated waterproof design, making it suitable for indoor or outdoor use and is wet-damp area approved. This converter includes integral short circuit, over voltage, over temperature 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 12/24 VDC current and anywhere 12/24 volt DC power is not readily available. Measuring 9.6 inches long by 2.6 inches wide by 1.5 inches deep, this unit weighs approximately one pound and is mounted with two conventional screws via slots that allow removal and repositioning simply by loosening the screws.

This converter comes with a straight blade plug on the input lead and a two pin Deutsch connector on the output lead, allowing users to simply plug the unit into a typical wall outlet, then connect any of our 12/24 volt lights equipped with Deutsch connectors, keeping in mind that the total amperage should ideally be kept within 75% of the unit`s total amperage output and not surpass its amperage maximum (25 amps @ 12VDC, 12.5 amps @ 24VDC). Most of our 12 volt LED lights and LEDLB, LEDLB-E, LEDP series lights as well as many of our HID units utilize Deutsch connectors, making this unit "plug-n-play" compatible. This converter will also work with our HML-1, CML-1, CML-2, HML-2, CML-3, HML-3 and CML-4 and HML-4 series spotlights. THIS WILL NOT WORK WITH THE HID GOLIGHT SPOTLIGHTS (GL-3XXXH-X models). If you purchase this transformer with any of our Larson Electronics lights, we will make sure that the connectors are a match.

**Features:** The DCP-25-DP 256 watt converter features full range, universal AC input capability and can be operated with 100 to 277VAC. The unit converts this AC power input to 256 watt, 25 Amp 12VDC or 12.5 Amp 24VDC output. IP67 rated, this unit is waterproof, wet and damp area approved and suitable for indoor or outdoor applications. Integrally designed protection includes overload, short circuit, over temperature 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. The unit will also shut down when an over temperature condition occurs and recovers automatically when the temperature returns to normal levels.

This power converter has a -30 / +60C operating temperature range and is UL UL1012 and UL60950-1 compliant as well as compliant with worldwide safety regulations for lighting. This unit has a 90% conversion efficiency and is suitable for use with moving LED signs and similar LED equipment. These units also feature Power Factor Correction, adjustable output current range from 8~ 16A either through the output cable or internal potential meter and have an input frequency range of 47 ~ 63Hz.

**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 12 volts to find the total amperage draw that will be placed upon the converter. For example, if you are using four of our LEDP10W-60E 60 watt LED lights, 240 watts divided by 12 volts is 20 amps. This would mean the DCP-25-DP is well suited as it would run at 75% capacity to produce the necessary 20 amps. Running these units at 100% of their capacity can create excess heat and lead to shortened converter life.

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# Frequently Asked Questions (FAQ)

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INPUT
(GREEN / YELLOW)
ACL (BROWN)
ACN (BLUE)
LARSON ELECTRONICS
INPUT
OUTPUT
Rated Power:
Vo ADJ.
Io ADJ.
OUTPUT
(BLACK) Vo-
(RED) Vo+
SELV IP65
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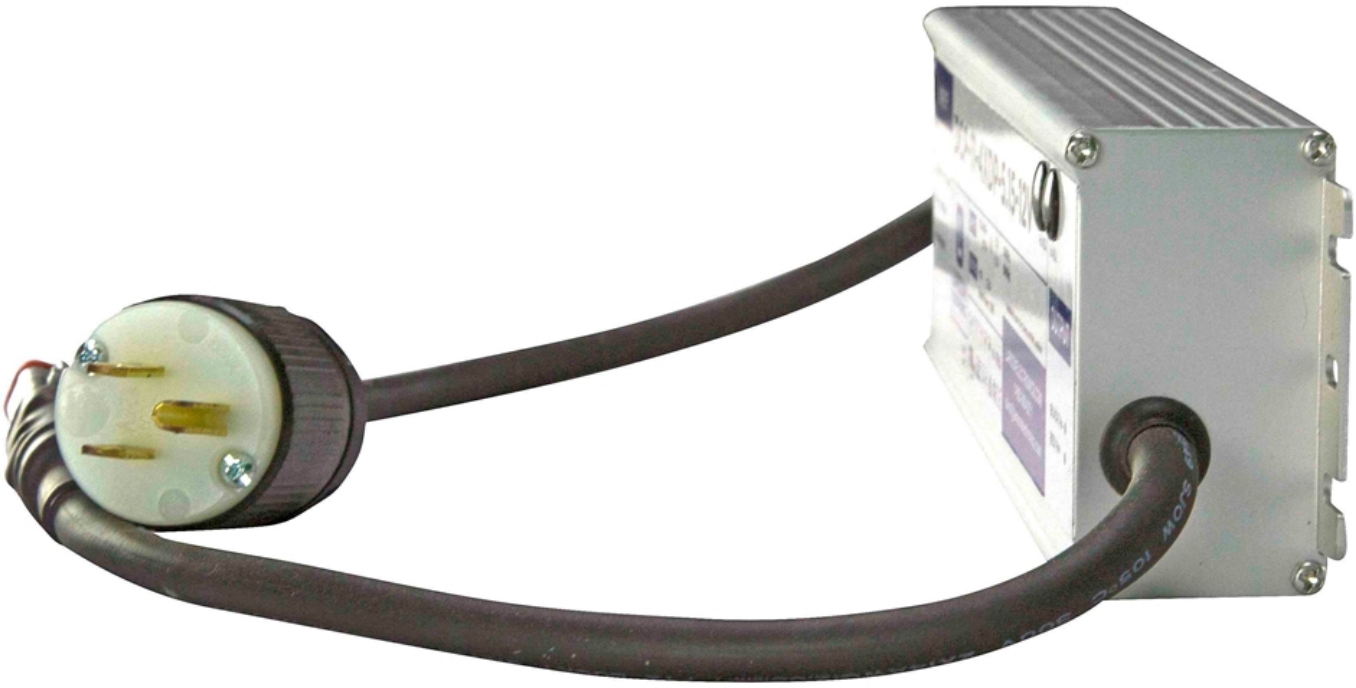

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**DCP-25-DP**

**Product ID: 50921**

**Export Control Classification Number (ECCN):** EAR99

**Options:**

**DCP-25-DP-Voltage**

**Example: DCP-25-DP-12V**

| Voltage | |
|---|---|
| 12 VOLT | -12V |
| 24 VOLT | -24V |

Links (Click on the below items to view):

- CE Certificate
- Certificate 1, Misc
- Certificate 2, Misc
- Certificate 3, Misc
- Dimensional Drawing 2D
- MSDS (Material Safety Data Sheet
- Operations Manual
- RoHS Certificate (Restriction of Hazardous Substances)
- STEP File (3D CAD Model)
- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map