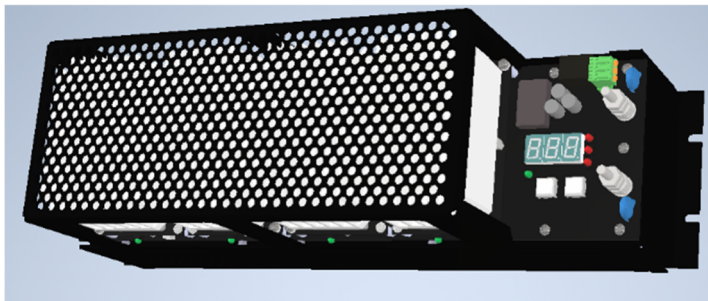


## FEATURES

- **9V to 36V DC Input**
- **2kVAC Isolated Output**
- **600W Maximum Output Power**
- **Up to 93% Efficiency**
- **No Cooling Fans Required**
- **4 Configurable 150W Modules**
- **AAR Binding Post Wire Connections**
- **Form-C Contact for Trouble Alarms**
- **AREMA Class C Environmental**
- **Output Voltage Trim Adjustment**



## DESCRIPTION

The 600W DC to DC Converter is a high efficiency power supply that can handle input voltages from 9VDC to 36VDC. It is designed to operate from -40C to +70C ambient with no cooling fans. Over the temperature and input voltage range, and with load transitions from 10% to 100%, the supply will maintain the output voltage within +/-2%.

Isolation of 2kVAC is provided from input to output, input to ground, and output to ground. This isolation is maintained regardless of number of installed modules. The unit features 4 module sockets that can be populated on the board to provide output power levels from 150W to 600W in 150W increments, so that the output power can be tailored to the specific application. No fans are required, instead the modules make use of a passive aluminum heatsink on each module (included with modules).

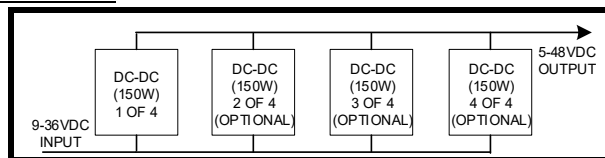
Modules are available in the following voltages: 5, 12, 15, 24, 28, and 48V. All modules accept 9-36V input, however some input/output configurations are not recommended (i.e. high boost configuration such as 12Vin to 48Vout).

The DC-DC converter features a bank of 3 seven-segment displays that are used to display the output current, output voltage, and input voltage in a sequential fashion. Buttons allow the user to cycle through the displayable measurements, including output voltage and output current. A green LED indicates supply health.

The DC-DC converter provides an alarm relay contact that is normally closed during fault-free operation. If a fault occurs, or if the unit is unpowered, the alarm relay contact will open.

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## TOPOLOGY



## PROTECTION FEATURES

The DC-DC converter has the following protection features:

- Under Voltage Lock Out ( $< 9V_{DC}$ )
- Output Over Current Shutdown
- Output Over-Voltage Shutdown
- Over Temperature Shutdown ( $@100^{\circ}C$ ) with hysteresis

## ELECTRICAL SPECIFICATIONS

Input Voltage \_\_\_\_\_ 9V<sub>DC</sub> to 36V<sub>DC</sub>  
 \_\_\_\_\_ (output derates 25% below 85% input/output voltage ratio)  
 Maximum Input Power \_\_\_\_\_ 680W  
 Output Voltage \_\_\_\_\_ 5, 12, 15, 24, 28, or 48V<sub>DC</sub> +/-2%  
 Maximum Output Power \_\_\_\_\_ 600W@12 V<sub>DC</sub>  
 Min Operating Temperature \_\_\_\_\_ -40 °C  
 Max Operating Temperature \_\_\_\_\_ +70 °C  
 Alarm Relay Contact Rating \_\_\_\_\_ 250VAC/30VDC @ 8A  
 Recommended External Breaker Size \_\_\_\_\_ 70A

## MECHANICAL SPECIFICATIONS

Height \_\_\_\_\_ 5.25 in (3U)  
 Width \_\_\_\_\_ 18.875 in  
 Depth \_\_\_\_\_ 4.125 in  
 Weight \_\_\_\_\_ 9 lbs. base  
 \_\_\_\_\_ +1.5 lbs. per module

## ORDERING INFORMATION

Item	Catalog Number
DC-DC Converter 1 Module (150W)	SiPS-yyV-1x150W-DCDC
DC-DC Converter 2 Modules (300W)	SiPS-yyV-2x150W-DCDC
DC-DC Converter 3 Modules (450W)	SiPS-yyV-3x150W-DCDC
DC-DC Converter 4 Modules (600W)	SiPS-yyV-4x150W-DCDC
150W Individual Power Module Kit	SiPM-150W-KIT-yyV

Specify module voltage in the "yy" field above when ordering.



Trilogy Products

# SIPS-xxV-Nx-600W-DCDC-GEN2

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## 150-600W DC-DC POWER SUPPLY

