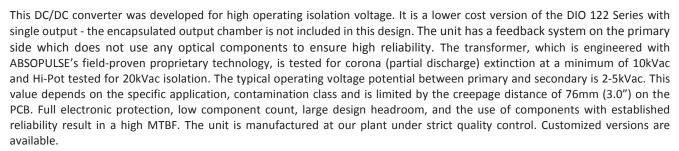
120W, Corona-free, 20kV Isolation Voltage DC/DC Converter **DIO 120 Series**

- 20kVac isolation input/output, output/chassis
- Corona free at 10kVac
- Rugged, industrial quality
- Convection cooled no fan
- Single output
- Fully electronic protection



SPECIFICATIONS

Input Voltage (Operating Range)

24Vdc (22-28V) 48Vdc (44-56V)

Other inputs available on request

Input Protection

Inrush current limiting Varistor Reverse polarity protection by crowbar diode Internal safety fuse Lower voltage than the specified minimum will not damage the unit

Isolation

1.5kVdc input to chassis 20kVac input to output 76 mm (3.0") spacing 20kVac output to chassis Corona extinction 10kVac minimum for the transformer

Standards

Designed to meet UL508 and related standards

EN 55022 Class A with margins

Switching Frequency

80kHz ±5kHz

Output Voltages

12V, 15V or 24Vdc at 5A max. Other outputs available on request

Redundancy diode

Not installed Available as option

Line/Load Regulation

±4% combined from 10% load to full load

Dynamic Response

Max 5% voltage deviation for 10% to 50% load step

Output Ripple/Noise

Better than 60mVrms or 300mV peak to peak (20MHzBW)

Overload Protection

Rectangular current limiting with short circuit protection.

Output Over-voltage Protection

Transzorb on output

Efficiency

Min 82% at full load

Operating Temperature

-20°C to 50°C for full specification without de-rating

Temperature Drift

0.03% per °C over operating temperature range

Cooling

By convection

Environmental Protection

Basic ruggedizing

Shock/Vibration

IEC61371 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

130,000 hours at 45°C Demonstrated MTBF is significantly higher.

Indicators

Green "Output ON" LED

Control Input

None

Alarm Output

None

Package Dimensions

Open board: 102 x 305mm (4" x 12") Component height: 70mm (2.3")

Weight

0.68kg (1.5 lb)

Connections

Input:

3-pole barrier-type terminal block with 3/8" spacing Output:

2-pole barrier type terminal block

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice

Terminal Block Pin-out

DC INPUT		
VIN	RTN	i⊦8
1	2	3



