



# **DC to DC Converter Rack Mounting Version 24 V DC 4.2 Amps (100 Watts) 4 Fused Outputs**

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Data Sheet & Product Brochure

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**Description**

Valiant’s DC to DC converter may be used to convert - 48 V DC (range 36 V DC to 76 V DC) Main Input Voltage to 24 V DC output voltage.



**- 48 V DC to 24 V DC Converter**

The DC to DC converter is designed for telecom applications requiring stable DC voltage.

This is an external converter power supply which is available in a 19 inch rack mount version, with four fused outputs.

**Application Diagram**



**Features**

- Converts - 48 V DC (range 36 V DC to 76 V DC) Main Input Voltage to 24 V DC, 4.2 Amps (100 Watts)
- Small and compact
- High quality and cost effective
- UL, recognized, TUV approved, CSA certified
- Rugged PCB type construction

**Safety Agency Approvals**

- UL60950
- C-UL recognized
- TUV approved

**CE Marking**

- Low Voltage Directive
- EMC Directive

INPUT VOLTAGE [V]	- 48 V DC (range DC 36-76)
MAX OUTPUT WATTAGE [W]	100 W
DC OUTPUT	4.2A @ 24 V DC

## Technical Specifications

<b>Input Voltage</b>	[V]	<b>DC 36 to 76</b>
Current	[D]	2.39typ
Efficiency	[%]	88typ
<b>Output Voltage</b>	[V]	24 V DC
Current	[A]	0 to 4.2A (Peak)
Line Regulation	[mV]	48 max
Load Regulation	[mV]	48 max
Ripple	-20 to +100 <sup>o</sup> C	120 max
[mVp-p]	-40 to -20 <sup>o</sup> C	150 max
Ripple Noise	-20 to +100 <sup>o</sup> C	150 max
[mVp-p]	-40 to -20 <sup>o</sup> C	250 max
Temperature	0 to +65 <sup>o</sup> C	240 max
Regulation [mV]	-40 to +100 <sup>o</sup> C	480 max
Drift	[mV]	90 max
Start-Up Time	[mS]	200 max (DC/IN 48V, Io=100%)
<b>Overcurrent Protection</b>		Works over 105% of rating and recovers automatically
Overvoltage Protection [V]		27.60 - 33.60
Operating Temp., Humidity and Altitude		-40 to +100 <sup>o</sup> C, 20 to 95% RH (Non-condensing) 3000 m (10,000 feet) max
Storage Temp., Humidity and Altitude		-40 to +100 <sup>o</sup> C, 20 to 95% RH (Non-condensing) 9000 m (30,000 feet) max
Vibration		10 to - 55Hz,49.0m/s <sup>2</sup> (5G), 3 minutes period, 60 minutes each along X, Y and Z axis
Impact		196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis
<b>Safety Agency Approvals</b>		UL60950-1, C-UL, EN60950-1
Conducted Noise		Complies with FCC-B, CISPR22-B, EN55022-B
<b>Cooling Method</b>		Convection

## Ordering Information

DC to DC Converter - 48 V DC to 24 V DC		
S.No.	Part #	Product Description
1	VCL-DCDC-DC048-DC024 -100W-4.2A-RK	Power Supply (External) DC to DC Converter 19 inch 2U Rack Mount Version, - 1 x DC Input (-) 48V DC [36-76V DC] - 1 x DC Output (-) 24V DC~4.2A 100W (4 outputs)

Technical specifications are subject to changes without notice.  
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