



ORION TELECOM NETWORKS INC.

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

Data Sheet & Product Brochure

ORION TELECOM NETWORKS INC.

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Description

Orion'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 with low EMI and EMC interference.

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
- RoHS Compliant

Safety Agency Approvals

- UL60950
- C-UL recognized
- TUV approved

EMI Compliance

- FCC-B
- CISPR22-B
- EN55022-B

EMC Compliance

- EN61000-4-2
- EN61000-4-3
- EN61000-4-4
- EN61000-4-5
- EN61000-4-6
- EN55022-B
- EN61000-6-2

CE Marking

- Low Voltage Directive
- EMC Directive

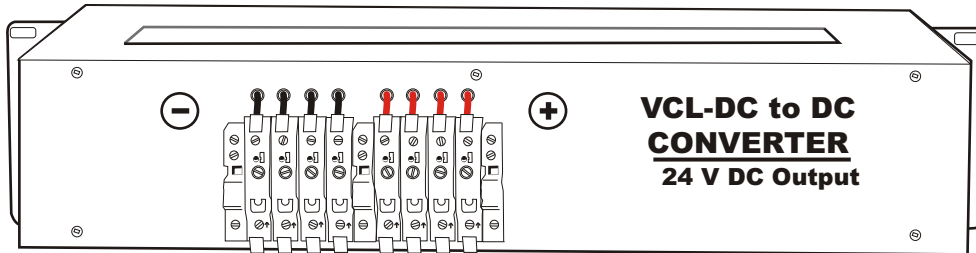
INPUT VOLTAGE [V]	- 48 V DC (range DC 36-76)
MAX OUTPUT WATTAGE [W]	100 W
DC OUTPUT	4.2A @ 24 V DC

Technical Specifications

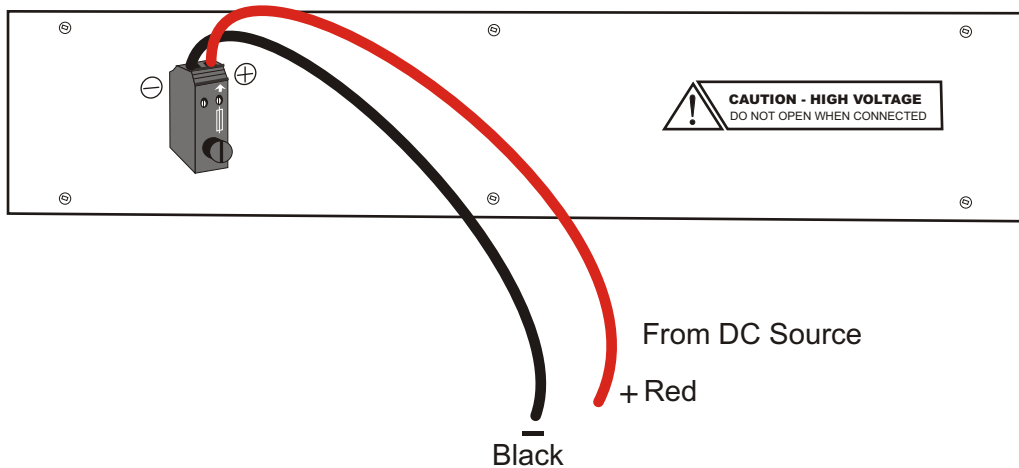
Input Voltage	[V]	DC 36 to 76
Current	[D]	2.39typ
Efficiency	[%]	88typ
Output Voltage	[V]	24 V DC
Current	[A]	0 to 4.2A (Peak)
Line Regulation	[mV]	48 max
Load Regulation	[mV]	48 max
Ripple	0 to +45 ^o C	120 max
[mVp-p]	-10 to 0 ^o C	120 max
Ripple Noise	0 to +45 ^o C	150 max
[mVp-p]	-10 to 0 ^o C	150 max
Temperature	0 to +45 ^o C	240 max
Regulation [mV]	-10 to 45 ^o C	480 max
Drift	[mV]	90 max
Start-Up Time	[mS]	200 max (DC/IN 48V, Io=100%)
Overcurrent Protection		Works over 105% of rating and recovers automatically
Overvoltage Protection [V]		27.60 - 33.60
Operating Temp., Humidity and Altitude		-10 to +70 ^o C, 20 to 90% RH (Non-condensing) 3000 m (10,000 feet) max
Storage Temp., Humidity and Altitude		-20 to +75 ^o C, 20 to 90% RH (Non-condensing) 9000 m (30,000 feet) max
Vibration		10 to 55Hz, 19.6m/s ² (2G), 3 minutes period, 60 minutes each along X, Y and Z axis
Impact		196.1m/s ² (20G), 11ms, once each X, Y and Z axis
Safety Agency Approvals		UL60950-1, C-UL, EN60950-1
Conducted Noise		Complies with FCC-B, CISPR22-B, EN55022-B
Cooling Method		Convection

DC-DC Converter Shelf

VCL-DC to DC Converter Frontpanel



VCL-DC-DC Converter Backpanel



Ordering Information

DC to DC Converter - 48 V DC to 24 V DC			
S.No.	Part #	Product Description	Qty
1	VCL-48V DC-24DC-100W-4.2A-RK	Power Supply (External) DC to DC Converter, 19 inch Rack Mount External Converter, Converts - 48 V DC (range 36 V DC - 76 V DC) to 24 V DC Output 4.2 Amps (100 watts)	1

Technical specifications are subject to changes without notice.
Revision 2 - September 10, 2009

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