ORION TELECOM NETWORKS INC.

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

Data Sheet & Product Brochure

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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.

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

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

- UI60950
- 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

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 [mVp-p]	-20 to +100^0 C -40 to -20^0 C	120 max 150 max
Ripple Noise [mVp-p]	-20 to +100^0 C -40 to -20^0 C	150 max 250 max
Temperature Regulation [mV]	0 to +65^0 C -40 to +100^0 C	240 max 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		-40 to +100^{0}C, 20 to 95% RH (Non-condensing) 3000 m (10,000 feet) max
Storage Temp., Humidity and Altitude		-40 to +100^{0}C, 20 to 95% RH (Non-condensing) 9000 m (30,000 feet) max
Vibration		10 to - 55Hz,49.0m/s^2 (5G), 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

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 PS	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 5 - November 19, 2013

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