

# ORION TELECOM NETWORKS INC.

## VCL AC to DC Converter

VCL AC to DC Converter



Front View

### Features

- Input Range (AC85 - 132V/AC170 - 264V)
- Rugged PCB type
- Built-in Inrush Current Protection
- RoHS Compliant

MAX OUTPUT WATTAGE[W]	144
DC OUTPUT	48V 3A

### Safety Agency Approvals

- Complies with DEN-AN
- UL1950, C-UL recognized, TUV approved
- UL recognized, TUV approved, CSA certified

### EMI Compliance

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

### Specifications

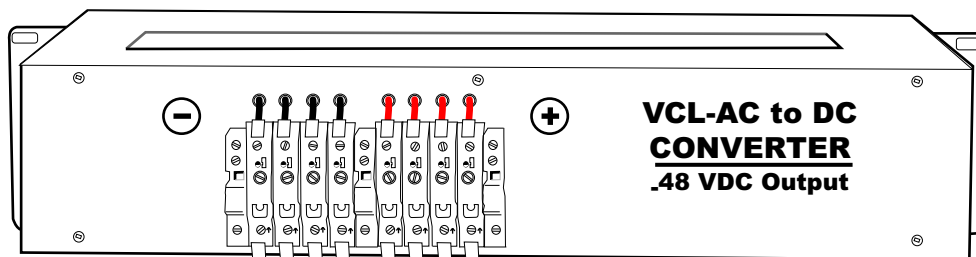
Input Voltage	[V]	AC 85-132 / 170-264
Current	[A]	ACIN 100V 3.6typ (Io=100%) ACIN 200V 2.6typ (Io=100%)
Frequency	[Hz]	47-440
Efficiency	[%]	82typ
Inrush Current	[A]	30typ (Io=100%) (At cold start)
Leakage Current	[mA]	0.75max (60Hz, According to UL, CSA, VDE and DEN-AN)
Output Voltage	[V]	48V DC
Current	[A]	3 A (Cumulative )
Line Regulation	[mV]	192 max
Load Regulation	[mV]	240 max
Ripple	0~+50 °C	150 max
[mVp-p]	-10-0 °C	200 max
Ripple Noise	0~+50 °C	400 max
[mVp-p]	-10-0 °C	600 max
Temperature Regulation	[mV]	560 max
Coefficient Drift	[mV]	192 max
Start-Up Time	[mS]	200 max (ACIN 100V, Io=100%)
Hold- Up Time	[mS]	10typ (ACIN 85V, Io=100%) 20typ (ACIN 100V, Io=100%)
Output Voltage Adjustment Range	[V]	48V ± 10%
Over current Protection		Works over 105% of rating (-H : peak) and recovers automatically
Over voltage Protection		Works at 115 ~ 140% of rating
Input- Output (Isolation)		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)
Input-FG (Isolation)		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min (At Room Temperature)

Output-FG (Isolation)	AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (At Room Temperature)
Operating Temp., Humid. and Altitude	-10~+60 °C, 20~90%RH (Non-condensing)
Storage temp., Humid. and Altitude	-20~+75 °C, 20~90% RH (Non-condensing)
Vibration	10 to 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each Along X, Y and Z axis
Impact	196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis
Safety	UL60950-1, EN60950-1, EN50178, CSA C22.2 No.234 Complies with DEN-AN and IEC60950-1
Conducted Noise	Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B

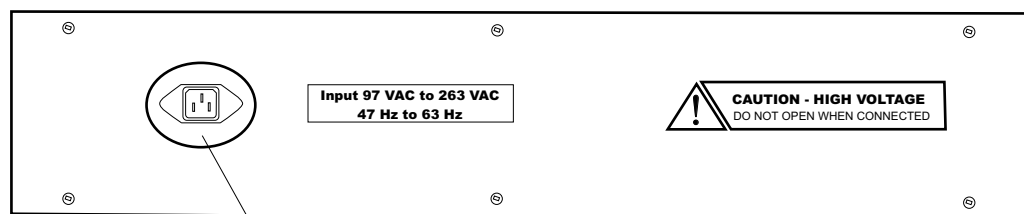
**Ordering Information**

AC to DC Converter			
S No.	Part #	Product Description	Qty
1.	Part No. VCL-30-014819-RK	AC to DC Converter	1

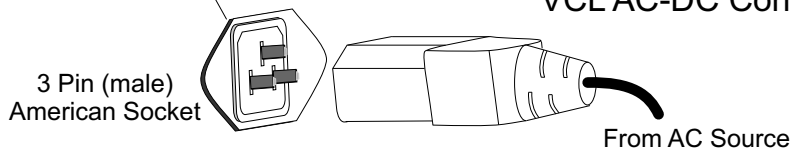
**AC-DC Converter Shelf**



VCL AC-DC Converter Frontpanel



VCL AC-DC Converter Backpanel



Technical specifications are subject to changes without notice.  
Revision 5 - June 01, 2008

**ORION TELECOM NETWORKS INC.**

16810, Avenue of Fountains, Suite # 108,  
Fountain Hills, AZ 85268, USA

**Phone:** +1 (480) 816 8672

**Fax:** +1 (480) 816 0115

**E-mail:** sales@oriontelecom.com

**Website:** http://www.oriontelecom.com