



an EnerSys company

Cordex HP™ LPS04

-48Vdc to ± 190 Vdc Quad Line Power Up-Converter Unit



- Providing four (4) ± 190 Vdc line powering RFT-V channels with current limiting and ground fault protection
- 92% efficiency for decreased OPEX and reduced carbon footprint
- Rugged and sealed enclosure for installation, either inside or outside power cabinets
- Wide operating temperature range for deployment in harsh OSP environments
- High reliability, sealed design

The LPS04 is a compact, standalone line powering DC to DC up-converter system designed for distributed power communications applications using ± 190 Vdc (RFT-V circuit) over twisted copper pairs.

Using switched mode technology, the LPS04 quad output converter module provides outstanding efficiency in a compact design. Applications include powering mini-DSLAM's, Optical Network Terminals (in Fiber to the Home Networks) as well as municipal Wi-Fi Access Points. The LPS04 may be installed inside or outside a remote OSP power cabinet. Line powering utilizes the existing remote power node backup without the need for AC utility or battery backup at the remote site, reducing the installation and operating expenses, and providing flexibility related to site selection for the installation of the remote communication equipment.

Alpha's LPS04 modular DC to DC converter unit incorporates a full range of standard features, including current limiting and individual ground fault interrupt for each circuit. Particular emphasis is placed on recognizing a fault condition and shutting down the circuit as quickly as possible to ensure the highest level of safety. Compliance with GR-1089-CORE - Class A2 enables craftspeople to work on the equipment while powered which significantly reduces administrative and labeling requirements, and overheads for the high voltage wiring.

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P/N: 0120037-001

Electrical	
Input Voltage:	-40 to -60Vdc
Output Voltage:	±190Vdc
Number of Outputs:	4
Power:	96W nominal per output (4 outputs per module) >92W for worst case conditions
Output Current:	Maximum 254 mA per output
Efficiency:	>92%
Regulation:	<2% no load to full load <1% line
Noise:	Wide band: <500mV RMS (10kHz to 10MHz) <2.5V pk to pk (10kHz to 100MHz)
Performance / Features	
Alarm Relays:	Form C
Alarm LED's (one per channel):	- Channel ok (green) - Recoverable fault (yellow) - Irrecoverable fault (red)
Mechanical	
Dimensions:	mm: 142H x 305W x 54D inches: 5.6H x 12W x 2.1D
Weight:	2.9kg (6.5lbs)
Connections:	Two (2) blunt cut cables

Environmental	
Temperature:	Operation: -40 to 65°C (-40 to 149°F) Storage: -40 to 85°C (-40 to 185°F)
Environmental Protection:	IP65
Humidity:	5 to 100% RH
Elevation:	-500 to 2800m (-1640 to 9186ft)
Agency Compliance	
Safety:	- IEC/CSA/UL 60950-1 - IEC/CSA/UL 60950-21 (RFT-V circuit) - IEC/CSA 1 UL 60950-22 - CSA 94.07/UL50E - GR-1089-CORE Class A2
EMC:	- CFR47 (FCC) Part 15 Class A - ETSI EN 300 386 - EN 55022 Class A

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