

an EnerSys company

LPR48-300

±190Vdc to 48Vdc Remote Line Power Down-Converter Unit



- Remote powering module providing up to 300W output at 48Vdc to power remote nodes
- Designed for installation in underground vaults, poles, walls and strand mount
- Wide operating temperature range for deployment in harsh OSP environments
- High reliability sealed and ruggedized design for a long life cycle
- Built-in holdup to ensure that the remote equipment rides through line surges

The LPR48-300 is a compact, sealed, standalone, line powered down-converter unit designed for remote line powering applications using ±190Vdc (RFT-V circuit) over twisted copper pairs.

The LPR48-300 contains four isolated down-converter circuits to convert the input from four (4) twisted copper pairs and provide up to 300W at 48Vdc to remote telecommunication equipment.

Applications include powering mini-DSLAM's (sealed DSLAM's), Multi-Dwelling Units (MDU) in Fiber to the Home Networks (FTTH), Distribution Points (FTTdP) as well as outdoor small cells in wireless networks. The LPR48-300 is sealed to an IP67 rating and may be discreetly deployed virtually anywhere: telecom vaults, pedestals, aerial strands, walls, lamp posts, poles, sides of buildings, bus stops, etc.

Line powering enables use of the existing centralized power node backup; eliminating the need at the remote site for AC utility or battery backup. This reduces installation and operating expenses, and provides flexibility related to site selection for the installation of the remote communication equipment.

Power holdup capabilities are incorporated into the LPR48-300 to provide at least 200 milliseconds of backup for a 300W load. The holdup prevents potential lengthy customer communication outages due to delayed remote node resetting (caused by line surges), ensuring maximum network reliability.

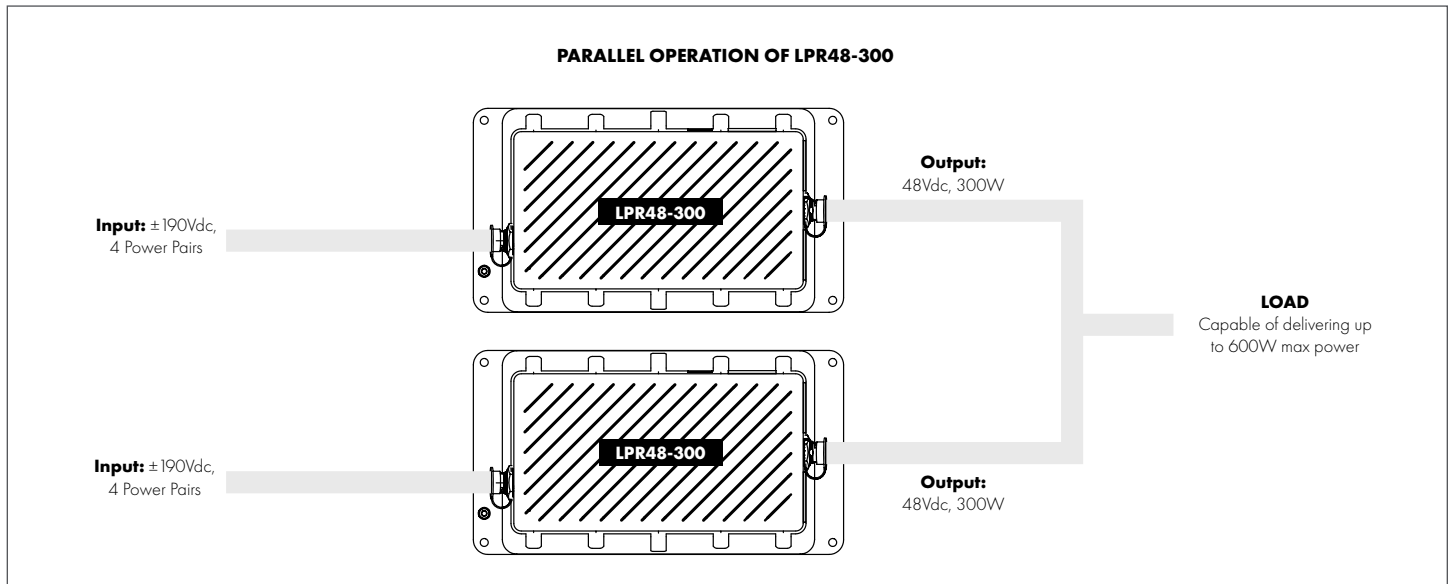
LPR48-300 ±190Vdc to 48Vdc Remote Line Power Down-Converter Unit

07/2020

P/N: 0370445-001

Electrical	
Input Voltage:	200 to 380Vdc (±100 to ±190Vdc)
Number of Inputs:	4
Input Current Per Feed:	245mA max
Output Voltage:	-54 to -56Vdc
Output Power:	Up to 300W (the power available from the unit depends on the distance from the up-converter and wire gauge of the twisted copper pairs)
Number of Outputs:	2
Output Current (de-rates with input voltage):	5.48A
Efficiency:	>92%
Electrical Noise:	<100mVRMS to 20MHz (wide band) <500mVp-p to 20MHz
Holdup:	>200 millisecond at 300W load
Load Sharing:	Within 10%
Other Feature(s):	Built-in paralleling capability
Mechanical	
Dimensions:	mm: 70H x 255W x 140D inches: 2.8H x 10.0W x 5.5D
Weight:	2.2kg (5lbs) - approximate
Connections:	Two IP67 sealed connectors (optional IP68 kit available)

Environmental	
Temperature:	Operation: -40 to 65°C (-40 to 149°F) Storage: -40 to 85°C (-40 to 185°F)
Environmental Protection:	IP67 (optional IP68 kit available)
Humidity:	5 to 95% RH
Elevation:	-500 to 2800m (-1640 to 9186ft)
Agency Compliance	
Safety:	<ul style="list-style-type: none"> • IEC/CSA/UL 60950-1 • Compatible with IEC/CSA/UL 60950-21 (RFT-V circuit) • IEC/CSA/UL 60950-22 • Low Voltage Directive 2006/95/EC GR-1089-CORE Safety
EMC:	CFR47 (FCC) Part 15 Class B EN 300 386 v1.6.1



#0470361-00 REV B



Worldwide Corporate Offices

Headquarter Germany

Hansastrasse 8
D-91126 Schwabach
Tel: +49 9122 79889 0
Fax: +49 9122 79889 21
Mail: info@alpha-outback-energy.com

Eastern Europe

ee@alpha-outback-energy.com

Middle East

me@alpha-outback-energy.com

France and Benelux

fbnl@alpha-outback-energy.com

Spain

spain@alpha-outback-energy.com

Russia

russia@alpha-outback-energy.com

Africa

africa@alpha-outback-energy.com

Alpha and Outback Energy GmbH reserves the right to make changes to the products and information contained in this document without notice. Copyright © 2020 Alpha and Outback Energy GmbH. All Rights reserved.

For more information please visit www.alpha-outback-energy.com