

FLPS04

Quad $\pm 190\text{Vdc}$ Line Power Up-Converter Outdoor System



Your Power Solutions Partner

- Provides four (4) $\pm 190\text{Vdc}$ line powering RFT-V channels with current limiting and ground fault protection
- Wide AC input range (90-307V) for worldwide deployments
- High efficiency for reduced OPEX and carbon footprint
- Optional integrated battery backup for continuous power during power outages
- NEMA 3R enclosure for superior reliability in outdoor applications
- Multiple mounting options to accommodate space limitations

The FLPS04 is an outdoor rated, line powered up-converter system designed for distributed power communications applications, using $\pm 190\text{Vdc}$ line powering (RFT-V circuit) over OSP twisted copper pairs. Applications include powering sealed DSLAM's (mini-DSLAM's), Optical Network Terminals (in Fiber to the Home Networks) as well as security and surveillance remote nodes.

The FLPS04 may be installed in locations where 90 to 307V AC utility power is available, to power multiple remote communication equipment located thousands of feet away using energized twisted copper pairs. The FLPS04 enables operators to reduce installation and operating expenses, and provides flexibility related to site selection for the remote equipment. The system may include options such as 48Vdc strings of standard 7Ah to 9Ah VRLA batteries to provide standby power, and a built-in battery heater to support extended runtimes at -40°C . All power modules are encased in IP65 sealed enclosures ensuring ruggedness and complete protection against moisture.

Alpha's FLPS04 Line Power Up-Converter Outdoor System incorporates a full range of standard features, including primary surge protection, 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 overheads and labeling requirements, associated with high voltage wiring.



Quad $\pm 190\text{Vdc}$ Quad Line Power Up-Converter Outdoor System

P/N 0100031-002 FLPS04 System with Battery Charging Option (space for 4 batteries)

P/N 0100031-003 FLPS04 Battery expansion cabinet with space for 8 x 7.2Ah & heater mats

P/N 0380452-001 Pole Mount Kit

ELECTRICAL

Input Voltage Range:90 to 307Vac
AC Input Frequency:47 to 63Hz
Output voltage: $\pm 190\text{Vdc}$ (RFT-V)
Output Power:96W nominal per output, >92W for worst case conditions (4 outputs per system)

MECHANICAL

Dimensions:
 mm:603H x 356W x 140D
 inches:23.8H x 14W x 5.5D
Weight:
 • 16kg (35lbs) FLPS04 System w/battery charging option
 • 10kg (22lbs) FLPS04 Battery Expansion Enclosure
Mounting: Pole and wall
Connections:
 AC Input: Terminal block (2 wire + GND)
 Output: 110 IDC type termination

ENVIRONMENTAL

Temperature:
 Operation: -40 to 46°C (-40 to 115°F) plus solar loading
 Storage: -40 to 85°C (-40 to 185°F)
Enclosure Rating: NEMA 3R
Surge Protection: UL 497 Listed protectors for the outputs
Humidity: 5 to 95% RH
Elevation: -500 to 2800m (-1640 to 9186ft)

PERFORMANCE/FEATURES

Power Backup (optional): Four 7Ah to 9Ah valve regulated lead acid (VRLA) (sold separately)
Battery Runtime:
 • A string of four 7.2AH batteries provides approximately 1 hour of power backup for two 75W remote load, placed 10kft away, each powered through two 22AWG twisted pairs
 • Adding two strings of four 7.2AH batteries in the FLPS04 Battery Expansion Cabinet provides >4 hours power backup for the same application.
Alarm: Form C relay (activated if there is any fault on the output channels)

AGENCY COMPLIANCE

Safety: IEC/CSA/UL 60950-1
 IEC/CSA/UL 60950-21
EMC: CFR47 (FCC) Part 15 Class A
 EN 55022 class A
Immunity: EN 61000-4-2
 EN 61000-4-3
 EN 61000-4-4
 EN 61000-4-5
 EN 61000-4-6
 EN 61000-4-11



Battery Expansion Cabinet (P/N: 0100031-003)

Alpha Technologies Ltd.

Canada: Burnaby, British Columbia T: 604.436.5900 F: 604.436.1233
 United States: Bellingham, Washington T: 360.647.2360 F: 360.671.4936

For more information visit www.alpha.ca

#0470295-00 Rev B (09/2017)

Alpha Technologies reserves the right to make changes to the products and information contained in this document without notice.
 Copyright © 2017 Alpha Technologies. All Rights Reserved. Alpha® is a registered trademark of Alpha Technologies.
 member of The Alpha Group™ is a trademark of Alpha Technologies.

member of The  Group™