

FLPS04

Quad ±190VDC Line Power Up-Converter Outdoor System

an EnerSys® company



- Provides four (4) ±190VDC 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 Line Power Up-Converter Outdoor System is an outdoor rated, line powered up-converter system designed for distributed power communications applications, using ±190VDC 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 FLPSO4 Line Power Up-Converter Outdoor System 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 FLPSO4 Line Power Up-Converter Outdoor System 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.

FLPSO4 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.

FLPS04 Quad ± 190VDC 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:	±190VDC (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) FLPSO4 System w/battery charging option 10kg (22lbs) FLPSO4 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 temote load, placed 10kft away, each powered through two 22AWG twisted pairs Adding two strings of four 7.2AH batteries in the FLPSO4 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)