Actelis Networks™

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INFONETICS RESEARCH

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PFU-8 Power Feeding Units

Actelis' PFU-8 Power Feeding Units can be used to power our widely deployed 2-pair repeaters for 2Base-TL Ethernet in the First Mile (EFM) systems, or for providing remote powering over copper for locations without local power.

Actelis' repeaters and ML684DRP devices are remotely powered from a PFU-8D Power Feeding Unit. While feeding a span from a single side, Actelis' PFU-8D supplies power up to 4 repeaters in a span across 8 pairs for a total of 16 repeaters. The PFU-8D can also feed spans from both sides (dual-side feeding), doubling the amount of repeaters per span, and as a result, the entire reach of the span.

The PFU-8D offers improved performance as well as it is designed to support future single side Dynamic Rate Boost (DRB) functionality for further enhancing the XR239 links rate and reach performance.

The PFU-8D is UL and NEBS Level 3 approved, meeting the most stringent carrier environmental and safety requirements. The PFU units can be attached to any Actelis ML600 system feeding up to 8 loops, and to any MLU-32 or MLU-64 front or rear access based system (ML2300, ML230 ML130, ML1300) with the ability to concatenate up to 16 PFU-8 units (feeding up to 128 loops) per system.

For remote powering and PoE, the PFU-8D can be used to power the ML684DRP switch and provide up to 70W of PoE over a maximum of 8 copper pairs for locations where local power is unavailable. This is ideal for remote WiFi or CCTV applications where, not only does the end device require remote powering using PoE, but there is also no local power for the ML684DRP itself.

The PFU-8D can also be used to power multiple devices as it can split the 8 pairs between multiple CPEs.

Specifications

PFU-8D/PFU-8E Power Feeding Unit

High Speed Link (HSL) Interfaces

- **Links:** Up to 8 pair copper links
- **Capacity:** Up to 8 repeater segments in dual-side feeding mode (4 in case of PFU-8E) across 8 pairs; up to 32 repeaters in PFU-8D and a total of 16 repeaters in PFU-8E. Single-side feeding from CO only is supported as well.
- **Connectors:** Terminal block for copper links and DB-25 for link to ML devices

Management

- Dip-switch configuration
- Fault reporting - via AUX port, daisy-chaining PFUs or via Alarm contacts
- LED Indicators – front panel

Physical Dimensions

- 1.6" H x 11" D x 8.4" W
- 4 cm H x 28 cm W x 21.3 cm W

Power Requirements

- **Power:** -40 to -72 VDC
- **Consumption:** <135W (-48V Nominal)

Power Output

- **PFU-8D Output:** ± 130 VDC, Non-simplex powering; 13.5W per PFU port
- **PFU-8E Output:** ± 60 VDC, Non-simplex powering; 12.5W per PFU port

Operating Temperature

- -40°F to 149°F (-40°C to 65°C) ambient

Regulatory Approvals/ Certifications

- GR-1089 A3 voltage safety class
- UL 60950-1/-21, CSA C22.2 60950-1/-2
- EN 60950-1/-21, (PFU-8E '-1' only)
- FCC Part 15 Class A
- CE - EMC and Safety
- NEBS Level III (GR-1089-CORE, GR-63-CORE)

Ordering PN's

- **PFU-8D PN:** 501RG2099; **CLEI code:** CMM1A00ARA
- **PFU-8E PN:** 501R20196; **CLEI code:** COM8110FRA

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