

Fiber Access Enclosure

Environmentally Controlled Enclosure for FTTH Applications



- Scalable, environmentally controlled enclosure system
- Fully integrated system
- Ideal for remote OLT applications
- High capacity 48VDC powered air conditioner
- Natural gas or propane DC generator system supports critical communications
- Reduces operational and recurring costs

As advanced voice, video and data fiber based services are deployed deeper into the broadband network, the need for reliable attractive modular transition nodes increases.

The Fiber Access Enclosure (FAE) supports a wide range of applications including bulk power to CATV hub and secondary hub requirements. Also ideal for remote optical transition applications including optical amplification, downstream DWDM demultiplexing, narrowcast combining and return path aggregation providing services to remote communities.

The FAE reduces operational costs by locating the electronics where needed and avoids the recurring costs of maintaining a real estate intensive building. Alpha's field power services group can provide turnkey installations, turn-up and test services.

The FAE is a recent addition to the Telecom grade Radium FITL-FTTC outside plant family of powering systems fully scalable enclosure system. The FAE system benefits from more than 20 years of Alpha's Outside Plant (OSP) powering experience.

The FAE integrates Alpha's comprehensive line of power solutions for today's complex Hub and environmentally controlled enclosure powering requirements including Alpha's Cordex high efficiency hot swappable switchmode rectifiers, and the AlphaGen™ series of telephony grade DC generators.

Features for the FAE include: front and rear accessible 19" or 23" equipment racks providing up to 46 rackmount spaces, durable powder coated aluminum construction, battery storage modules isolated from the equipment section and house up to four (8) group 31 batteries. Typical configurations include integrated AC service entrance, TVSS, AC distribution, standby generator interface, lighting, heat exchanger, fan/filter or air conditioner thermal management, rectifiers or AC UPS equipment.

General Details	
Environmental Rating:	NEMA 3R when configured with door mounted fans and filter system. NEMA 4X when configured with heat exchanger or air conditioning system.
Design Standards:	Following NEC & Telcordia Technologies (Bellcore) GR-487, GR-63 and GR-108 guidelines.
Compliance:	Third party approval from National Recognized Testing laboratory (NRTL).

Mechanical		
	Dimensions D x H x W (in)	Weight (lb)
Equipment Enclosure 1:	40 x 36 x 34	175
Equipment Enclosure 2:	40 x 50 x 34	210
Battery Storage Module:	40 x 14 x 34	140
Side Chamber SC1:	18 x 44 x 42	95
Side Chamber SC2:	18 x 58 x 42	110

Physical	
Material:	High strength corrosion resistant aluminum
Finish:	Almond color powdercoat finish

Fans and Filters
The most basic thermal management system supporting the FAE utilizes conformal-coated, variable speed and alarm monitored fans with electrostatic air filters providing up to 500W thermal dissipation. This configuration has a NEMA 3R rating.
<ul style="list-style-type: none"> • Variable speed controlled DC fans continue to operate during a utility outage • Conformal-coated fans • Electrostatic and washable air filters • Field replaceable fans

Heat Exchanger
An airtight rear door and a heat exchanger equipped hinged front door providing thermal dissipation.
<ul style="list-style-type: none"> • Heat exchanger heat pipe technology provides efficient thermal transfer • Minimizes internal temperature rise above external ambient • Variable speed controlled DC fans continue to operate during a utility outage • Field replaceable fans

DC Air Conditioner
For applications requiring the most reliable below ambient cooling and dehumidifying system for supporting seamless performance through extended utility outages.
<ul style="list-style-type: none"> • Variable speed brushless motor 48VDC compressor system assures optimum efficiency over the full range of thermal loading and ambient temperatures • 3,000 & 6000BTU @ 43°C/110°F rating • Redundant conformal-coated fans have >50,000hrs of life and low voltage disconnect circuitry

AC Air Conditioner
Ideal for applications requiring cooling and dehumidifying with little or no standby runtime performance.
<ul style="list-style-type: none"> • 6,000BTU @ 43°C/110°F rating • No filters to replace • 240VAC

* Reducing the internal dissipated heat load reduces internal ambient.



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