

Application

Clearfield's FieldSmart FiberFlex 3000 is optimized as a fiber-first design for a variety of powered cabinet deployment scenarios. The cabinet is designed to configure for numerous applications including remote OLTs with PON distribution, wireless base stations with fiber backhaul aggregation and active network equipment with back-up power needs, utilizing a flexible vertical layout and with a modular design that allows for networks to scale for the future growth.

The cabinet's footprint makes it easy to drop into any application with a pad or vault mount option. Designed to meet GR-487 requirements, the FiberFlex 3000 is the ideal outdoor cabinet solution for the harshest environments.

Description

The FiberFlex 3000 is an all-in-one design, capable of integrating fiber, power (AC & DC) and active equipment. This cabinet features flexible vertical options to meet a wide variety deployment environments and is scalable for future growth. The FiberFlex 3000 equipment bay features a 19" or 23" vertical equipment rack to provide options for:

- 36RU active electronics and passive equipment with no batteries
- 30RU with 1 string of batteries
- 20RU with 2 strings of batteries



The FiberFlex 3000 provides up to 864 internal fiber distribution ports for subscriber PON deployments, along with complementary splitter capacity. The FiberFlex 3000 accepts local AC power via the integrated AC Load Center with generator plug for back-up power.

Features and Benefits

Flexibility (Optional Add Features)

- Environmental controls include HVAC, heat exchangers, direct air cooling. Configured to meet application and location needs
- AC power system with main breaker, 12 slot load center and surge protection
- 30 amp Generator Plug for long run time back-up power
- DC power source sized to meet application and distribution needs
- Batteries sized to meet power requirements and back-up power time
- Internal LED light to provide better visual experience of equipment installed on the rack
- Door alarms dry contacts normal closed to provide intrusion alarm

Space Utilization

- Interior rack can be 19" or 23" EIA standard spacing
- Various mounting options – pad mount, vault mount

Integrity

- Closed cell door gasket and attached to cabinet frame compliant with NEMA standards
- Stainless steel hardware to prevent corrosion
- Grounding provisions - with ground straps for doors and master ground bar mounted in cabinet
- 15 amp convenience quad receptacle
- Sunshield to reduce the effects of solar loading
- Lifting eyes on four corners of the cabinet to enable ease of installation
- GR-487 compliant powder coating of cabinet
- Designed, tested and certified to GR-487; Designed to meet NEMA 4X

Access

- Fiber-first design for access storage, routing and protection of fiber
- Fiber from 144 to 864 with splitters or WDMs panel
- Standard is Clearview® Blue Cassette (patch only)
- Cable entry ports with removable plate to facilitate ease of installation when using a vault or mounted on concrete pad
- Stainless steel door stays adjustable from 90 degree to 120 degree openings
- Front and rear door with security padlock hasp with ¼ turn sealing mechanism
- 3-inch mounting plinth to craft-friendly installation

Technical Specifications

FieldSmart FiberFlex 3000	
Dimensions	Base cabinet with Battery Compartment: 72"H x 30"W x 36"D
Weight	Cabinet: 600 lbs.
Mounting Options	Pour-in-Place Pad Template, or Split Lid Vault
AC Power Center Options	AC Power feed: 240 VAC single phase, 50/60Hz, 125 Amp service with UL listed service panel. High power AC surge protection
AC/DC Rectifier Option	<p>ABB SPS Slimline Series with various distribution models. (Configured part numbers include two modules)</p> <ul style="list-style-type: none"> Standard: (12) GMT, (2) Load Brkr (60A Max), (2) Batt. Brkr (Up to 3) 1600W Rectifier Modules Optional: (24) GMT, (2) Batt. Brkr (Up to 3) 1600W Rectifier Modules <p>Delta Eltek FPS System</p> <ul style="list-style-type: none"> FPSK59I-ANL-VC distribution with (10) GMT, (4) Load Brkr, (2) Batt. Brkr, Controller (Up to 6) 1800W Rectifier Modules (Configured part numbers include two modules)
Battery Capacity	<p>Designed to accommodate 80AH to 200AH front terminal batteries.</p> <p>For top terminal capacity, contact Clearfield for further information.</p>
Cooling/Environmental	<p>Heat Exchanger Option: 1800W (99W/C) HEX, up to 2 for a total maximum cooling capacity of 3600W.</p> <p>Air-Conditioning Options: 6000 BTU AC or DC powered Air-Conditioner with Heat. Up to 2 AC units per cabinet configuration.</p> <p>Direct Air Cooling (DAC) Option: Direct Air Cooling Fan – Non-environmentally sealed.</p>
Wired Fiber Capacity	<p>Up to 864 Distribution; Standard cassette is Clearview Blue for patch only. Available in 50, 75, or 100-foot tail increments. *</p> <p><i>* Note: All available tail lengths are measured from the rear of the fiber panel installed in the cabinet.</i></p>
Fiber Management Options	<p>Up to 864 position fiber distribution in 144 or 288-port increments, various connector and distribution options. Splitters and WDM in various ratios available. Vertical and horizontal rack rail fiber and cable management</p> <p>Configurable transport module for fiber separation of subscriber and active equipment transport</p>
Available Rack Units	36RU, 30RU, 20RU, depending on configuration selected.
Safety and Compliance	GR-487, NEMA 4X, UL508a, UL50, and UL50E

Configured Part Numbers - "Under Construction"

Mounting Options

Mounting Option	Part Number	Description
Pad Template	150-00027	FiberFlex 3000/1700 Pour-in-Place Template

Splitter Options

Part Number	Description
KC1-CAA	Ruggedized Splitter Module, Loaded with (1) 1X32 Splitter, SC/APC Connectors, Front Pigtail Input(s) and Outputs, Bend Insensitive Fiber, Ruggedized Jacket.

Battery Options

Part Number	Description
100-10004	Battery String Kit (ENERSYS), 4 x SBS170F 170 AH - Front Access
140-00038	Battery String Kit (ENERSYS), 4 x SBS190F 190 AH - Front Access