

Application

Clearfield's FieldSmart FiberFlex 1700 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 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 1700 is the ideal outdoor cabinet solution for the harshest environments. At 48", the FiberFlex 1700 was designed to meet more stringent local permit height restrictions.



Description

The FiberFlex 1700 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 of deployment environments and is scalable for future growth. The FiberFlex 1700 equipment bay features a 19" or 23" vertical equipment rack to provide options for:

- 25RU - no separate sealed battery section
- 17RU - with 1 string of batteries

The FiberFlex 1700 provides up to 432 internal fiber distribution ports for subscriber PON deployments, along with complementary splitter capacity. The FiberFlex 1700 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 with equipment installed on the rack.
- Intrusion alarms.

Space Utilization

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

Integrity

- Closed cell door gasket is 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.
- 20 amp convenience receptacle.
- Sunshield to reduce the effects of solar loading.
- Lifting eyes on four corners of the cabinet to enable ease of installation.
- Designed, tested and certified to GR-487. Designed to meet NEMA 4X.

Access

- Fiber-first design for excess storage, routing and protection of fiber.
- Fiber counts from 12 to 432, splitters cages holding up to 18 splitters.
- Standard is Clearview® Blue Cassette (patch & splice) (patch).
- 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 deg to 120 degree openings.
- Front and rear door with security padlock hasp with ¼ turn sealing mechanism.
- 3" mounting plinth to allow craft-friendly installation.

Technical Specifications

FieldSmart FiberFlex 1700	
Dimensions	Base cabinet: 48" H x 30" W x 36" D, mounting plinth adds 3"
Weight	Cabinet: 400 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	ABB SPS Slimline Series with various distribution models. (Configured part numbers include two modules) <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 Delta Eltek FPS System <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	Designed to accommodate 60Ah to 200Ah front terminal batteries. For top terminal capacity, contact Clearfield for further information.
Cooling/Environmental	Heat Exchanger Option: 1000W (47W/C) HEX, up to 2 for a total maximum cooling capacity of 2000W. Air-Conditioning Option: 4000 BTU AC or DC powered Air-Conditioner with Heat. Up to 2 AC units per cabinet configuration. Direct Air Cooling (DAC) Option: Direct Air Cooling Fan – Non-environmentally sealed.
Wired Fiber Capacity	Up to 432 Distribution; Standard cassette is Clearview Blue for patch only. Available in 50, 75, or 100-foot tail increments.* * Note: All available tail lengths are measured from the rear of the fiber panel installed in the cabinet
Fiber Management Options	Up to 432 position fiber distribution in 144 or 288 port increments, various connector and distribution options. Splitters and WDM, various ratios are available. Vertical and horizontal rack rail fiber and cable management
Available Rack Units	25RU, 17RU, depending on configuration selected
Safety and Compliance	GR-487, NEMA 4x, pending UL508a

Mounting Options

Mounting Option	Part Number	Description
Pad Template	150-00027	FiberFlex 3000/1700 Pour-in-Place Template
Pad Template	150-00050	FiberFlex 3000/1700 Pour-in-Place Template Convergent Expansion

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

