

FieldSmart[®]

Fiber Active Cabinet (FAC) 900



Application

The FieldSmart Fiber Active Cabinet (FAC) 900 has been designed to offer a low profile and compact size. It complies with a 36" height requirement that allows a minimum intrusive effect in urban, suburban and residential areas. Compliant with GR-487, the FAC 900 is the ideal outdoor cabinet solution for the harshest outdoor conditions, providing a sealed internal environment where external air and humidity are completely isolated from the electronic equipment.

Description

The FAC 900 is an environmentally-controlled enclosure constructed of powder-coated aluminum. The FAC 900 cabinet's equipment compartment features a 19" swing frame front and rear, accommodating up to, 9RU of active electronics equipment. The FAC 900 provides up to 576 internal fiber distribution ports for subscriber PON deployments, along with complementary splitter capacity. The FAC 900 accepts local AC power and uses a door mounted integrated air-to-air heat exchanger and DC-powered fans to cool the equipment inside the cabinet. A separate, vented, internal compartment houses an optional battery string. In addition, an optional under-cabinet battery compartment can be ordered.



Features and Benefits

Integrity

- Designed to seamlessly integrate a variety of standard options that are expected in remote cabinets, such as the rectifier system, battery base, battery warmers and field configurable fiber or copper distribution frames
- Supports a variety of cabinet mounting options including pad, pole, wall and H-frame eliminating concern with right-of-way issues and problematic installation locations

Protection

- Telcordia GR-487 compliant and UL-60950/UL-50 spec
- Environmentally sealed design protects internal equipment investment from dust and rain
- Rated for deployments in harsh environments per GR-487: -40°F to +115°F (-40°C to +46°C)

Access

- Provides front and side doors for full access to the equipment
- Designed to allow access to all complementary elements of a remote outdoor cabinet deployment such as the copper or fiber cables, fiber splicing and distribution modules, power and DC distribution systems, AC power and battery charge breakers, AC outlet, etc.
- Door security and hardware features designed to protect from vandalism and theft

Investment

- The FAC 900 is designed for modular expansion, allowing cost effective service deployment and scalability
- Cabinet engineered features designed to ensure ease of maintenance and eliminate service interruptions
- Provides an ideal platform for the migration of copper access services to fiber access infrastructure and electronics

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Technical Specifications

FieldSmart FAC 900	
Dimensions	Base cabinet: 36"H x 25"W x 57"D (battery box internal to cabinet) Riser options for cabinet: 6", 12" or 16" H
Weight	Local AC power w/ 100 Ah battery enclosure: 290 lbs. Equipped with one 100 Ah battery string: 575 lbs.
Mounting Options	Pre-Cast or Pour-in-Place Pad Template, Wall/H-Frame Mount, Vault/Riser (3rd Party Supplied)
AC Power Center Options	AC Power feed: 240 VAC single phase, 50/60HZ, 30 Amp service with UL listed service disconnect, high power Joslyn AC surge protector
AC/DC Rectifier Option	Alpha Cordex 1RU -48 VDC Rectifier System Two 25 Amp rectifier modules, auto-senses and adjusts for low and high AC input. CXCM1+ Controller Low input (100–185 VAC): Max. total power output 1200 Watts; Max. total current 25 Amps (2 modules, non-redundant) High input (185–264 VAC): Max. total power output 2400 Watts; Max. total current 50 Amps (2 modules, non-redundant)
Cooling/Environmental	1050 Watt cooling capacity with Dantherm door mount heat exchanger, as per GR-487 Generic Requirement Ambient temperature (per GR-487): -40°F to +115°F (-40°C to +46°C)
Wired Capacity	Fiber: Up to 576 subscriber fiber terminations with internal battery box in cabinet, up to 576 subscriber fiber terminations (with or without internal battery box in cabinet). Up to 18 integrated PON splitters. Copper: Up to 384 copper lines with MS2 or 710 splice options
Fiber Management Options	12- or 24-position Clearfield Fiber Splice and distribution on 19/23" mount. Support for in-cabinet GPON and ActiveE fiber management: Up to 576 position fiber distribution in 12-, 24-, 48-, or 96-port increment assemblies; SC/APC connector, loose tube or ribbon. Up to eighteen integrated 1x2, 1x16, 1x32 GPON Splitters (optional).
Copper Protection Options	Standard 5-pin protection blocks — modular in 48-pair increments, up to eight 48-pair protection blocks
Available Rack Units	Up to 9RU in a 19" rack
Safety and Compliance	UL-60950, Standard for Safety, Issue 1, April 1, 2003 CAN/CSA-C22.2 No. 60950 EMC FCC Part 15 Class A ICES-003 Class A Telcordia, GR-63-CORE, NEBS Telcordia, GR-487, Generic Requirements for Electronic Equipment Cabinets

Pre-Configured Part Numbers

Part Number	Description
R-2ZDB-ZZZZ-ZZZ-ZZZ-ZZ	FieldSmart Fiber Active Cabinet, FAC 900 Enclosure, Vertical 19 Inch Equipment Rack, 750W Heat Exchanger, No Load Center, No Rectifier, No Battery String, No Bulkhead

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Configured Part Numbers

Disclaimer/Note: Paper configurator shown is for reference only and should not be used to configure a saleable product configuration. All options shown on paper configurators may not be available or compatible with other options listed. Please contact your Clearfield representative for assistance in product configurations.

R - 2 Z D B - Z - - Z Z Z - Z

1 **Select AC Power Source**
 1 = AC Load Center
 2 = AC Load Center/Generator Connect
 Z = None

2 **Select Rectifier**
 1 = 48 VDC Rectifier
 Z = None

3 **Select Number of Battery Strings**
 1 = One String
 4 = One String with Battery Wamer
 Z = None

4 **Select Distribution Ports**
 00H = 1 Empty 192 Port Bulkhead
 00J = 2 Empty 192 Port Bulkheads
 00K = 3 Empty 192 Port Bulkheads
 00P = 1 Empty 96 Port Bulkhead
 00Q = 2 Empty 96 Port Bulkheads
 00R = 3 Empty 96 Port Bulkheads
 00S = 4 Empty 96 Port Bulkheads
 00T = 5 Empty 96 Port Bulkheads (No Battery)
 00U = 6 Empty 96 Port Bulkheads (No Battery)
 00V = 7 Empty 96 Port Bulkheads (No Battery)
 ZZZ = None

5 **Select Accessories**
 E = 18 POS Splitter Card Cage
 Z = None

Mounting Options

Mounting Option	Part Number	Description
Pad Mount	140-00048	Fiber Active Cabinet 900 Pad Mount Kit With Pour in Place Template
Wall/H-Frame Mount	140-00049	Fiber Active Cabinet 900 Wall/H-Frame/Mount Kit

Battery Options

Battery Option	Part Number	Description
100 Ah Battery String	140-00002	Fiber Active Cabinet Northstar Battery String Kit, 100 Ah - Front Access