

FieldSmart®

Fiber Active Cabinet (FAC) 5400



Application

The FieldSmart Fiber Active Cabinet (FAC) 5400 is the largest cabinet offering from Clearfield. It has been designed with the philosophy of modularity and flexibility, while maintaining a maximum cooling capability for the active electronics. Compliant with GR-487, the FAC 5400 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 5400 is an environmentally-controlled enclosure constructed of powder-coated aluminum. The FAC 5400 cabinet's equipment compartment features a 23", 27RU swing frame front and rear, accommodating up to 54RU of active electronics equipment. The FAC 5400 provides up to 1,152 internal fiber distribution ports for subscriber PON deployments along with complementary splitter capacity. The FAC 5400 accepts local AC power and uses either two door mounted integrated air-to-air heat exchangers and DC-powered fans or integrated DC-powered air conditioners to cool the equipment inside the cabinet. A vented, integrated-cabinet compartment below the equipment compartment houses optional batteries.



Features and Benefits

Integrity

- The FAC 5400 can accommodate equipment in the front compartment, as well as auxiliary and complementary options in the rear compartment and the splice compartment. The 23" equipment racks in front, rear and splice compartment, allow for a variety of deployment options.
- Designed to seamlessly integrate a variety of standard options that are expected in remote cabinets, such as the rectifier system, battery warmers and field upgradeable fiber bulkheads

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

- Equipment swing frames provide for front and rear access to the equipment within the cabinet
- 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 5400 is designed for modular expansion, allowing for cost effective expansion of services in the future
- Cabinet engineered features designed to ensure ease of maintenance and eliminate service interruptions

FieldSmart®

Fiber Active Cabinet (FAC) 5400



Technical Specifications

FieldSmart FAC 5400	
Dimensions	49"W x 58"D x 74"H
Weight	1,175 lbs. (Not including batteries)
Mounting Options	Pad
AC Power Center Options	Power feed: 240 VAC single phase, 60-Amp service with UL listed service disconnect. Redundant AC feeds to rectifier. Redundant DC feeds to C7 shelf. Low voltage DC disconnect. (-42V) High power AC surge protection (ABB).
Optional AC/DC Rectifier Options	Eltek CC9S-ANL-VC Compact Power System 120 Amp max. total capacity (90A N+1). Rectifier modules: (4) 30 Amp modules supported (Configured part numbers include two default).
Cooling/Environmental	Option 1: Dantherm door mount heat exchanger options (1800 Watts/6000 Btu/h – up to two 3600 Watts/12,000 Btu/h total with front and rear door options). Option 2: Dantherm door mount air conditioner options (1800 Watts/6000 Btu/h – up to two 3600 Watts/12,000 Btu/h total with front and rear door options). Ambient temperature per GR-487: -40° F to +115° F (-40°C to +46°C)
Wired Capacity	Fiber: Up to 1152 subscriber fiber terminations utilizing bulkhead options. Up to 36 integrated PON splitters. Copper: Up to 1152 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 1152 position fiber distribution in 48-, 96-, 144-, or 288-port increments assemblies; SC/APC connector, loose tube or ribbon. Up to 36 integrated 1x2, 1x16, 1x32 GPON Splitters (optional).
Copper Protection Options	Standard 5-pin protection blocks — modular in 48-pair increments, up to (24) 48-pair protection blocks
Available Rack Units	54RU 23" swing frame rack with optional 19" vertical frames
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-4ZFC-ZZ1Z-ZZZ-ZZZ-ZZ	FieldSmart Fiber Active Cabinet, FAC 5400 Enclosure, Standard 23 Inch Equipment Rack, 1800 watt (6142 Btu/h) Heat Exchanger, No Load Center, No Rectifier, Supports 1 Battery String, No Bulkhead
R-4ZFD-ZZ1Z-ZZZ-ZZZ-ZZ	FieldSmart Fiber Active Cabinet, FAC 5400 Enclosure, Standard 23 Inch Equipment Rack, 3600 watt (12,284 Btu/h) Heat Exchanger, No Load Center, No Rectifier, Supports 1 Battery String, No Bulkhead
R-4ZFE-ZZ1Z-ZZZ-ZZZ-ZZ	FieldSmart Fiber Active Cabinet, FAC 5400 Enclosure, Standard 23 Inch Equipment Rack, 1800 watt (6,000 Btu/h) Air Conditioner, No Load Center, No Rectifier, Supports 1 Battery String, No Bulkhead
R-4ZFF-ZZ1Z-ZZZ-ZZZ-ZZ	FieldSmart Fiber Active Cabinet, FAC 5400 Enclosure, Standard 23 Inch Equipment Rack, 3600 watt (12,000 Btu/h) Air Conditioner, No Load Center, No Rectifier, Supports 1 Battery String, No Bulkhead

