FieldSmart®
FiberFlex 2000

Application

Clearfield's FieldSmart FiberFlex 2000 enclosure has been designed from the ground up for maximum flexibility, scalability and space utilization. Optimized for fiber service delivery from 144 to 576 fiber ports utilizing the compact patch only Clearview Black Cassette, the FiberFlex 2000 is a fiber-first design for a variety of powered cabinet deployment scenarios such as the network edge, wireless backhaul and active ethernet networks. The cabinet's small footprint makes it easy to drop into any application in any location. Designed to comply to GR-487, the FiberFlex 2000 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 FiberFlex 2000 is an environmentally-controlled enclosure constructed of powder-coated aluminum. The FiberFlex 2000's equipment bay features a 19" vertical equipment rack, accommodating up to 20RU of active electronics equipment. The FiberFlex 2000 provides up to 576 internal fiber distribution ports for subscriber PON deployments, along with complementary splitter capacity. The FiberFlex 2000 accepts local AC power and features an external AC Load Center. A door mounted integrated air-to-air heat exchanger and DC-powered fans cool the equipment inside the cabinet. A separate, vented, under-cabinet compartment houses optional batteries. A second battery compartment can be added for additional backup capabilities.

Features and Benefits

Flexibility
- External load center – Simplifies and separates AC connection on site
- Multiple fiber counts – 144 to 576 fiber ports in a single cabinet (Clearview Black Cassette standard)
- Various mounting options – Pad mount, Pole Mount, Wall/H-Frame Mount
- Stackable backup battery bays – Add additional battery compartment to double available backup time
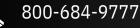
Space Utilization
- Only 54" x 24" x 35" to fit nearly any deployment scenario
- Optimized internal space utilization for maximum equipment capabilities and fiber port count

Integrity
- Designed to comply to GR-487 and NEMA 4 for matchless protection in the harshest environments
- 750-watt air-to-air Heat Exchanger standard
- Factory integration and testing of the AC Load Center, Rectifier, Backup Battery Harness and Heat Exchanger

Access
- Provides front and rear doors for full access to internal equipment
- External AC Load Center for easy access and optimal interior space utilization
    - Fiber-first design for access storage and routing of fiber (or copper) cables and accessories, such as splitters and WDMs
- Door security and hardware features designed to protect equipment from vandalism and theft.
- Door integrity alarm standard.

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Technical Specifications

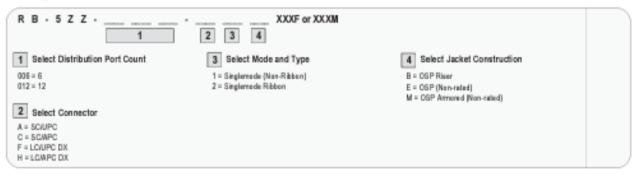| FieldSmart FiberFlex 2000	
Dimensions	Base cabinet with Battery Compartment: 54"H x 24"W x 35"D
	Base Cabinet with 2nd Battery Compartment Option: 66"H x 24"W x 35"D
Weight	Cabinet with Battery Compartment: 250 lbs. Equipped with one 155 Ah battery string: 650 lbs.
Mounting Options	Pre-Cast or Pour-in-Place Pad Template, FUTURE: Wall/H-Frame Mount and Vault/Riser (3rd Party Supplied)
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 (Joslyn)
AC/DC Rectifier Option	Eltek Flatpack S (FPS) 1RU -48vdc Rectifier System No-LVD, Two 20 Amp rectifier modules, autosenses and adjusts for low and high AC input
	Smartpack S Controller.
	Nominal Input Voltage Range: (185 - 270 VAC): Max. total power output 1000 Watts; Max. total current 40 Amps (2 modules) or 20 Amps (2 modules N+1)
Battery Capacity	Designed to accommodate (2) strings of Northstar NSB 155FT RED batteries. One string support in the standard battery compartment. Dual battery string support using expanded backup option with second battery compartment orders. (Increases capacity to 310Ah total backup).
	For all other battery types required, compartment space is as follows: 11.2"H x 5"W x 22"D
Cooling/Environmental	1000-Watt cooling capacity with Dantherm door mount heat exchanger
	Ambient operating temperature range: -40°C to +46°C (-40°F to +115°F)
Wired Fiber Capacity	Up to 576 SC connector fiber terminations in a Clearview Black Cassette
	Up to 12 optional transport fiber terminations
	Up to eighteen integrated PON splitters
Fiber Management Options	Up to 576 position fiber distribution in 144 or 288-port increments, SC/APC connector, loose tube or ribbon
	Up to eighteen integrated splitters in various ratios available
	Configurable transport module for fiber separation of subscriber and active equipment transport
Available Rack Units	20RU in a standard 19" rack
	6RU with full 576 fiber distribution SC ports and rectifier option
Safety and Compliance	Designed to Telcordia, GR-487, Generic Requirements for Electronic Equipment Cabinets, UL E-6294

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Configured Part Numbers - Main Cabinet

R - 5 A - ___ . ___ - ___ . ___

| 1 | 2 | 3 | | 4 | | 5 | 6 | 7 | | 8 | 9 | 10 | | 11 | 12 |

1 Select AC Power Source

1 = AC Load Center
2 = AC Load Center with Generator Connect
Z = None

2 Select Rectifier

1 = 48VDC Rectifier
Z = None

3 Select Number of Battery Strings

1 = One String
2 = Two Strings
4 = One String with One Battery Warmer
5 = Two Strings with Two Battery Warmer
6 = Two Strings with One Battery Warmer

4 Select Distribution Ports

000 = 0
144 = 144
288 = 288
432 = 432
576 = 576

5 Select Connector

A = SC/UPC
C = SC/APC
F = LC/UPC DX
H = LC/APC DX
Z = No Connectors

6 Select Cable Mode and Type

0 = None
1 = SM (Non-Ribbon)
2 = SM Ribbon

7 Select Jacket Construction

B = OSP Riser
E = OSP (Non-Rated)
M = OSP Armored (Non-Rated)
Z = None

8 Select Feeder Ports

0 = 0

9 Select Number of 288

0 = 0
1 = 1
2 = 2

10 Select Number of 144

0 = 0
1 = 1
2 = 2
3 = 3
4 = 4

11 Select Length

2 = 50 ft (15.2 m)
3 = 75 ft (22.9 m)
4 = 100 ft (30.5 m)
Z = None

12 Select Accessories

A = Half Splitter Tray (up to 288)
B = Full Splitter Tray (288-576)
Z = None

Configured Part Numbers - Transport Module

R B - 5 Z Z - ___ . ___ XXXF or XXXM
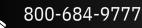
| 1 | | 2 | 3 | 4 | XXXF or XXXM |

1 Select Distribution Port Count

006 = 6
012 = 12

2 Select Connector

A = SC/UPC
C = SC/APC
F = LC/UPC DX
H = LC/APC DX

3 Select Mode and Type

1 = Singlemode (Non-Ribbon)
2 = Singlemode Ribbon

4 Select Jacket Construction

B = OSP Riser
E = OSP (Non-rated)
M = OSP Armored (Non-rated)

Mounting Options

Mounting Option	Part Number	Description
Pad	150-00010	FiberFlex 2000 Pour-in-Place Template

Battery Options

Battery Option	Part Number	Description
155 AH Battery String	150-00009	FiberFlex 2000 155 AH Northstar NSB155FT Red Battery String

Splitter Options

Part Number	Description
KE1-CAA	WaveSmart High Density (HD) Splitter, 1 x 32 SCA 85 x 35 x 6 mm