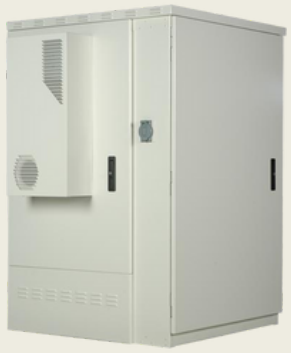
PRODUCT DATASHEET

Clearfield ODC-2000/2000E Outdoor Cabinet



DESCRIPTION

The Clearfield ODC-2000/2000E broadband enclosure has been designed with the philosophy of modularity and flexibility, while maintaining a maximum heat dissipation capability. Designed to accommodate broadband shelves such as the Calix C7, E-Series, and F5, the ODC-2000/2000E provides all the powering, protection, and cable management to serve up to 960 copper or up to 2560 PON customers. The ODC-2000/2000E supports 100% density of narrowband and broadband services.

KEY ATTRIBUTES

MODULARITY: Clearfield cabinets are designed to easily scale from a minimal configuration to the maximum capacity of the cabinet. Design consideration has been taken to allow the customer to field install and scale common options such as line protection, cooling, and cross-connect modules. Cabinets can be configured for as low as 480 lines with the option of scaling up to the maximum capacity of 960 lines.

FLEXIBILITY: The ODC-2000/2000E has been designed to accommodate third party equipment in both the front and rear equipment compartments as well as the splice chamber. Twenty-three-inch equipment racks in the front, rear, and splice chambers allow for the installation of common devices such as fiber management, passive optical splitters, and CWDM EDFAs.

REAR ACCESS: When configured for broadband shelves, the ODC-2000/2000E front and rear 23-inch racks swing out to provide rear access to equipment mounted in the racks. For all configurations, the protector panels are mounted on swing-down frames for troubleshooting and cabling purposes.

FTTP READY: The ODC-2000/2000E can terminate large amounts of fiber, comfortably serving as the intermediary to deploy fiber-to-the-home or fiber-to-the-business services. With the usage of standard 23-inch equipment racks, the ODC-2000/2000E can support the usage of high density third party Fiber Distribution Panels, allowing a smooth transition of every subscriber from copper- to fiber-based services when desired. The ODC-2000/2000E manages up to two Calix C7 shelves full of fiber-based interfaces (including connectors, splice trays, and distribution panels).

SERVICE VARIETY: The ODC-2000/2000E supports traditional copper-based services (POTS, DS0 specials, xDSL), yet gives service providers the ability to support large quantities of high revenue-generating services, such as DS1 (hi-cap quality with 1:N protection), DS3, OC-3, OC-12, Gigabit Ethernet, and fiber-to-the-home, all from the same platform with no need to deploy overlay networks for specific services.

POWER MANAGEMENT: Intelligent power management features guarantee continued delivery of narrowband and selective user-provisioned broadband services during extended periods of battery-powered operation.

ADVANCED COOLING: The ODC-2000/2000E cabinet has been designed from the ground up to address heat dissipation issues associated with the deployment of high-speed services from remote terminal locations. Cooling is achieved via door-mounted air-to-air heat exchangers that are either factory- or field-installable. The cooling options support 480 or 960 POTS+ADSL services.

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EASE OF MAINTENANCE: The Clearfield powered outdoor cabinets contain a variety of features designed to ensure ease of maintenance, including:

- Hinged protector panels to facilitate simple access for wiring purposes
- 23-inch swing frames in front and rear when configured for broadband shelves
- Door-mounted heat exchanger options for simple field replacements
- A separate compartment for fiber and copper access
- Convenient access for troubleshooting and electrical maintenance

FLEXIBLE SPLICE COMPARTMENT: The ODC-2000/2000E cabinet offers a modular approach to fiber and cable splicing:

- Cable towel bars provided with the cabinet can be used to neatly route up to 960 lines of copper
- Twenty-three-inch rack space in the splice chamber is provided to mount copper protection panels, cross-connect panels, and fiber management systems
- The cable entrance area accepts up to:
  - seven 4-inch (inside diameter) subscriber cable entries
  - four 2-inch (inside diameter) fiber entries
  - one 2-inch maximum cable entry for AC

FIELD UPGRADES: The ODC-2000/2000E supports field-installable options. These include:

- A door-mount heat exchange system
- Fiber management options, fiber splice trays, and distribution cassettes
- Avestor Battery Installation Kit
- EDFA Mounting Kit (Third Party)
- Test head installation kits (Third Party)
- Generator connectors
- Cross-connect panels
- Line protection blocks (50-pair increments)
- Battery warmer pads
- Zone 4 seismic kits for batteries
- Additional broadband shelves

S P E C I F I C A T I O N S

Clearfield ODC-2000/2000E Outdoor Cabinet

WIRED CAPACITY

Copper: Up to 960 lines
PON: Up to 2560 subscribers
Up to 768 ADSL2 and POTS ports*
Up to 384 VDSL2 and POTS ports*

*ODC-2000E model only

DIMENSIONS

48.5 inches (width) x 48.5 inches (depth) x 73.5 inches (height)

WEIGHT

1271 lbs. (not including batteries)

COLOR

Warm gray

ENVIRONMENTAL

Ambient temperature (per GR-487):–40° C to +46° C (–40° F to +115° F)

COOLING

Door-mount heat exchanger options (1850 Watts – up to two 3700 Watts total)

MOUNTING OPTIONS

Pad

POWER

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 (Joslyn)
Remote power feed:±190 VDC (E-Series only)

DC RECTIFIERS

Valere Compact Power System
4 rectifier modules maximum
120 Amp max. total capacity
Rectifier modules: 20 or 30 Amp

CABLE MANAGEMENT

Copper plant OSP connectors: MS2 or 710

ALARMS

Breaker/fuse fail alarm (rectifier distribution)
Door security alarm
Rectifier Minor alarm
Rectifier Major alarm
Heat exchanger fail/overtemp alarm
LVD Active alarm
Batteries on discharge alarm
AC Fail alarm

BATTERY BACK-UP

Preferred battery: Northstar 170 AH
Up to three strings per cabinet

Vendor	Model	Ah
Northstar	NSB 170FT	170Ah
Avestor	SE48S80	160Ah
Flamm	12FAT 155	155Ah
GNB	M12V155FT	155Ah
C+D Dynasty	TEL-150F	150Ah
Northstar	NSB 100FT	100Ah
PowerSafe	SBS C11	92Ah

COPPER PROTECTION PANELS

Standard 5-pin protection blocks – modular in 50-pair increments
Up to six (6) 50-pair protection blocks per Protector Panel
Mounting Frame (4 frames maximum)

SAFETY

UL 60950
CAN/CSA-C22.2 No. 60950

EMC

FCC Part 15 Class A
ICES-003 Class A

CALIX EQUIPMENT SUPPORTED

E-series
C7 chassis
F5 chassis

CLEARFIELD FIBER MANAGEMENT OPTIONS

23-inch fiber splice trays
Fusion—12 positions per tray*
Heat Shrink—12 positions per tray*
Mechanical—12 positions per tray*

*up to 10 trays per splice tray holder

CLEARFIELD FIBER DISTRIBUTION PANEL OPTIONS

12 & 24 position panel: LC, SC, ST, and FC connectors

CLEARFIELD FIBER DISTRIBUTION CASSETTES

SC connectors—12 positions per cassette
LC connectors—12 positions per cassette

GENERATOR CONNECTOR OPTIONS

30 Amp NEMA twist lock w/breaker and interlock
60 Amp pin & sleeve w/breaker and interlock (Hubbell)

COMPLIANCE

Telcordia, GR-63-CORE, NEBS Requirements, Issue 1, October 1995
Telcordia, GR-487, Generic Requirements for Electronic Equipment Cabinets, Issue 2, March 2000

S P E C I F I C A T I O N S

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SPACE FOR THIRD PARTY EQUIPMENT

Configuration	Front	Rear
Non-Cross Connect (480 lines)	15 RU/12" Deep	27 RU/12" Deep
Cross Connect (480 lines)	15 RU/12" Deep	15 RU/12" Deep
Non-Cross Connect (960 lines)	5 RU/12" Deep	27 RU/12" Deep
Cross Connect (960 lines)	5 RU/12" Deep	3 RU/12" Deep