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Equipment Installation

FR00001500

20-Slot Chassis, 19" Rack-Mountable  
with Dual-Redundant 120/240 VAC 50/60 Hz Power Supply

# Ethernet Rack-mount Products



# Table of Contents

Table of Contents.....	1
Introduction.....	2
Caution/Warning – Fiber-optic Equipment	
Power Connection and Requirements	
Status Indicators – Main and Aux	
Hot Insertion - Rackcards	
Air Flow and Environmental	
Installation Procedures.....	3
Background	
Tools Required	
Procedure Overview	
Chassis Installation.....	4
Power Supply Installation.....	5
Ethernet Module Installation.....	6

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## INTRODUCTION

Thank you for buying your new chassis, which was proudly assembled in the USA, by Fiberdyne Labs, Inc. Your new chassis offers unique value and outstanding quality. While your chassis is easy to install, please, review this document before installation.

## CAUTION/WARNING – FIBER-OPTIC EQUIPMENT

Always practice eye safety. To prevent eye damage, never look into any fiber ports or attached fiber-optic cables. Additionally, install covers on all exposed fiber-optic ports (e.g. equipment ports or cable connectors), when not in-use.

To prevent damage, to fiber-optic connectors and to fiber-optic cables, use proper fiber-optic handling and connector cleaning techniques.

## POWER CONNECTION

The chassis supports up to two, 110-watt, power supplies in a "N+1" redundancy configuration. As such, each supply can support the full-power requirements of the chassis. If either supply fails, the other will support the entire chassis' needs. The power supplies are hot-swappable and are powered by separate power cords. If the cords are connected to separate AC power feeds, and if AC power is lost on one feed, then the supply, connected to the remaining power feed, will provide full-power to the chassis.

## STATUS INDICATORS – MAIN AND AUX

The LEDs indicate proper function of the Main power supply and of the Auxiliary power supply (if so equipped).

## POWER REQUIREMENTS

120/220 VAC, 50/60 Hz (1 Amp max. @ 110 VAC, 0.5 Amp max. @ 220 VAC)

## HOT INSERTION - RACKCARDS

The chassis has been designed to allow hot insertion/removal of any card from any slot.

## AIR FLOW AND ENVIRONMENTAL

- The chassis has a fan for forced-air cooling. The vent must remain unobstructed.
- Operating Temperature/Humidity: 0 to 50 degrees C, 5% to 95% (non-condensing).

## INSTALLATION PROCEDURES

To add/replace components, use the following installation procedures.

### BACKGROUND

Fiberdyne supplies its products, with all power supplies and rack-mount cards pre-installed. However, customers may expand their systems by adding a redundant power supply or additional Ethernet, media-conversion, printed-circuit modules.

### TOOLS REQUIRED

- Cross-point (e.g. Phillips) screwdriver
- Slotted screwdriver

### PROCEDURE OVERVIEW

1. To mount the chassis to a 19-inch or 23-inch rack frame, go to page 4.
2. To add/replace Power Supply Module, go to page 5.
3. To add/replace Ethernet Modules, go to Page 6.

**To mount the chassis to a 19-inch rack frame or to a 23-inch rack frame:**

Warning:

The chassis can be heavy, even with only a few components. Two people should be used during this procedure.

1. Unpack chassis. Set it near the rack frame, so the Power Supply Module(s) (on rear) face away from you. Ensure the “System Monitor” module, on the front, is upright (i.e. readable).

Note:

The chassis will fit either a 19-inch rack frame or a 23-inch rack frame. The mounting tabs are reversible. The unit ships with the tabs set for a 19-inch rack frame. If the chassis will be installed in a 23-inch rack frame, then disconnect, reverse and remount the tabs. Additionally, the tabs may be mounted in alternate positions, for flexible orientation of the chassis (e.g. rackcards may face the rear of the rack).

2. Using two people, hoist the chassis to its install position, within the rack frame.
3. Slide chassis into rack frame, until the “ears” contact the rack frame.
4. Secure the ears to the rack frame, using the enclosed bolts.
5. Attach enclosed power cord(s) to the Power Supply modules (rear of chassis).
6. If you are not adding any modules, then attach power cord(s) to the plant power. Otherwise, proceed to the appropriate “module” installation section.
7. If power is connected, confirm LED(s) are illuminated on the System Power monitor panel, on the chassis front (right edge). The LEDs will indicate which power supply (or power supplies) are connected.

### **To add/replace Power Supply Module:**

#### **Warning:**

If removing a power supply module, disconnect the power cord from the subject module before accomplishing this procedure.

#### **Note:**

The 19-inch rack-mount, can hold one or two power supply modules. Empty slots are protected with blank metal plates.

1. Face the rear of the chassis [i.e. the side, where the power cord(s) are connected].
2. Find the screws, which secure the large blank plate (or the subject power supply module). Remove screws.
3. Align new power supply with chassis. The black metal plate will become the new rear protective plate on the chassis.

#### **Note:**

The bottom of the power supply module has an “L-shaped” bracket. This bracket must be aligned with the cut-out in the bottom of the chassis.

4. Push new power supply module into chassis, until module’s external, black plate contacts the chassis.
5. Secure module’s screws into chassis. Use finger-tight pressure, only.
6. Connect power cord to power supply module.
7. Connect power cord to plant power.
8. Confirm proper operation: the LEDs on the System Power monitor panel (chassis front) should illuminate.

### To add/replace Ethernet Modules:

#### Warning:

To sustain network operations, disconnecting power is not necessary. Be aware, however, that power is present on chassis connectors. Do not insert anything into the chassis, except appropriate Fiberdyne modules.

#### Caution:

Proper grounding precautions should be used, when handling the modules.

#### Note:

The 19-inch rack-mount, can hold one to twenty (20) Ethernet modules. Empty slots are protected with narrow, black, metal plates.

1. Locate slot, where new module will be added (or old module will be removed).
2. Loosen one knurled screw at the top and the bottom of the subject slot's cover plate.
3. Grasping the two knurled screws, pull the plate/module from the chassis.
4. Align new module with uncovered slot.

#### Note:

The test, on the new module's cover plate, should be upright, like the System Power monitor panel, at the front/right edge of the chassis.

5. Insert the new module, with the top and bottom board edges inside the guide rails.
6. Push the new module into the chassis until the cover plate contacts the chassis.
7. Secure the module with the two knurled screws. Use finger-tight pressure only.
8. Repeat for additional modules.
9. If power is not already applied, then connect power to chassis and confirm proper operation of chassis and modules.