

Purpose:

To describe Fiberdyne's rack-mount chassis, which hosts the rack-card version of Fiberdyne's media converters and repeaters.

Conceptual Usage:

Each rack-mount chassis can hold 20 Ethernet rack-cards. These cards are media converters or repeaters, and they are hot-swappable. They support 10Base (Ethernet), 100Base (Fast Ethernet) and 1000Base (Gigabit Ethernet) data links. Typically, a chassis is used at a central location, where fiber links are aggregated. Then, standalone converters/repeaters are used at remote locations.

The chassis can host one or two power-supply modules. When two modules are loaded, they serve as redundant, power supplies. Each module can support the power requirements of an entire, fully-loaded chassis. The power-supply modules are field-replaceable and hot-swappable.

Features:

- Hosts multiple types of Ethernet Converter/Repeater rack-cards
 - Media Converters: 10Base, 100Base, 1000Base
 - Repeaters: 10Base-FL, 1000Base-T/SX/LX/ZX/CWDM
 - Hot-swappable Converter/Repeater rack-cards
- Redundant, hot-swappable, Power-Supply modules available
- Status LEDs on "System Power" monitor panel: Power Main and Power Aux
- Color – Black

Standard Configurations:

- Rack-mountable – 19-inch or 23-inch rack frames; reversible mount tabs
- System Power monitor module
- Two (2) power-module slots on rear of chassis
- 20 converter/repeater rack-card slots on front of chassis

Options:

- Redundant, power-supply modules: 120/240 VAC and 48 VDC
- Media Converter and Repeater rack-cards (sold separately, but the chassis can be shipped – fully-loaded)

Specifications:

<i>Item Description</i>	<i>Unit</i>	<i>Chassis (Base Unit)</i>
Power (max) - Chassis (fully-loaded)	W	120
Power-Supply Modules - Input	V_i	- 120/240 VAC, 50/60 Hz (1 A max) - 48 VDC (2.5 A max)
Power-Supply Modules - Output	V_o	5 (DC)
Temperature Range *	$^{\circ}$ F ($^{\circ}$ C)	32 to 122 (0 to 50)
Package Size ** – W x D x H	inch (cm)	19 x 16 x 5.25 (48.3 x 40.6 x 13.3)
Chassis Weight – with only 1 supply	pound (kg)	25 (11.3)
Chassis Weight – with 2 supplies	pound (kg)	31 (14.1)
Rack-card Weight – for reference	ounce (gram)	3.5 (99)

Notes:

- * Non-condensing humidity.
- ** Package Depth includes 2" (5.1 cm) for handles. Two handles are mounted on the front of the rack-mount tabs. Additionally, a handle is mounted on each power-supply module, at the rear.

Ethernet Rack-mount Chassis

Fiberdyne Labs, Inc.
Product Specification

Part Number Build Matrix:

F	R	X	X	X	X	X	X	X	X
1	2	3	4	5	6	7	8	9	10
F	R			0	0				

FR = Fiberdyne Labs “Rack-mount” electronics

Digit #	Description	Options *
3 rd & 4 th	Package	EC = Ethernet Chassis PS = Power Supply module for chassis **
5 th & 6 th	Reserved	00 = reserved
7 th & 8 th	Main Power Supply	00 = none 12 = 120/240 VAC, 50/60 Hz 48 = 48 VDC
9 th & 10 th	Auxiliary Power Supply ***	00 = none 12 = 120/240 VAC, 50/60 Hz 48 = 48 VDC

Notes:

- * Add “Special Instructions” for custom configurations. For example: if the chassis will be shipped with 10 FTX-250R-SL rack-cards, then list: “Special Instructions: install 10 FTX-250R-SL rack-cards before shipping.”
- ** If ordering a separate, redundant, power-supply module (e.g. spare), then specify the type in digits 7 & 8 and “00” in digits 9 & 10 (e.g. 120/240-VAC, power-supply module has part number, “FRPS001200”).
- *** If this option is selected, then this is the *redundant* power supply.

Examples and Cross-references (with old part numbers):

Description	Part Number	Old Part #(s)
Chassis w/one 120/240 VAC module	FREC001200	FR00001500
Chassis w/two 120/240 VAC modules	FREC001212	FR00001500 plus FR00002500
Chassis w/one 48 VDC module	FREC004800	FR00005000
One, redundant 48 VDC power module	FRPS004800	FR00004800