

PBX-1R

1 Channel Fiber Optic Bypass Switch





FEATURES:

- 2 x 2 Port Multimode or Singlemode Optical Bypass Switches
- Non-Blocking Operation
- Non-Latching: Application of 24 VAC Maintains Inserted/Switched State
- Low Optical Insertion Loss
- Rack Mount and Stand-Alone Configurations
- Multimode or Singlemode operation
- ST or FC optical connectors
- Local LED status indicators to monitor critical system diagnostics
- Output relay for switch status
- Hot swappable cards

DESCRIPTION:

The PBX-1 is 1 channel fiber optic non-latching optical bypass switch designed to be used for configuring redundant or high reliability video or data networks where communications reliability and availability are demanded.

The user can configure a fiber optic network where protection against a loss of fiber (fiber optic cable breakage) or modem failure is required.

This units are designed to be used in conjunction with T1 and E1 fiber optics modems for "drop & insert" data applications.

Ether one or two switches can be housed in a standard card housing.

In normal (inserted) mode of operation, the switch is energized and data is routed through the associated modems (see Figure 1). In case of power failure, the switch reverts to its bypass mode and the data is routed through the bypass switch and sent to the next node in the network (see Figure 2).

Available in multimode or single mode versions, these switches feature wide temperature operation range, making them ideal for use in harsh environments.

CONFIGURATIONS:

The PBX-1 card is available as a 1-slot rack card that can be installed in all of the Meridian card chassis. This product can be easily converted to a standalone module with the SR-500 or SR-1000/1002 chassis.

MARKETS:

- $\sqrt{}$ Intelligent Transportation Systems
- ✓ Video/Audio/Data Transport Systems
- $\sqrt{1/E1}$ Digital Networks

SPECIFICATIONS:

Optical

Maximum Insertion Loss	1 dB
Wavelength Range	1240 nm to 1640 nm
Insertion loss (Multimode)	2.0 dB (typical)
Insertion loss (Singlemode)	1.0 dB (typical)
Control Voltage	+5V
Crosstalk	75 dB (typical), 60 dB (max)
Repeatability	+/- 0.02dB (typical)
Switching speed	20 msec (max)
Switching lifetime	10 million cycles
Fiber Type (Multimode)	62.5/125µn, 50/125µm
Fiber Type (Singlemode)	9/125µn

Connectors

Alarm	Screw Terminal
Optical	ST - MM(default),
	FC - SM(default)
Power	See SR-500/SR-1002 Series
	Chassis for Details

Power

Card 1 Watt

Indicators (LEDs)

Power Green (ON)

Physical

Dimensions (Card)
Weight (Card) No. of Slots Module

 160 mm (6.3") L, 127 mm (5") H
20mm (0.80") W 450 gms (16 Oz) ... 1 See SR-500 Brochure ...

Quality

Environmental

Operating Temperature	-34° C to $+74^{\circ}$ C
Storage Temperature	-55°C to +85°C
Relative Humidity	0 to 95% Non-condensing







