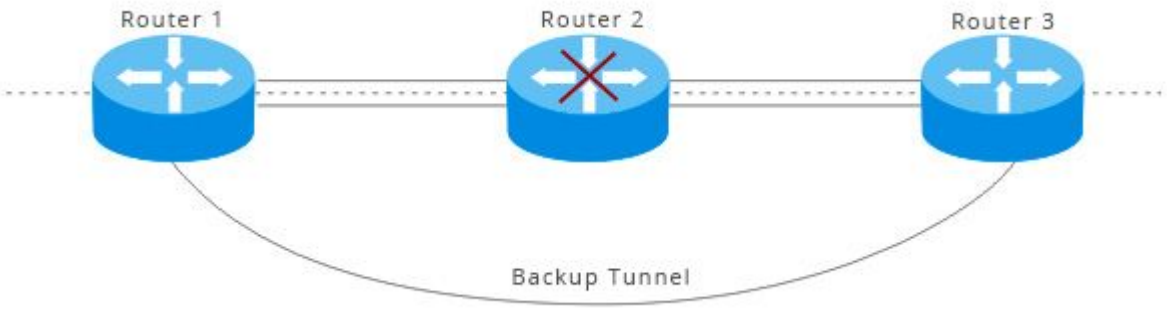
FS-OBP-C Bypass Protection Board

Node protection is a intelligent optical switch system which can bypass fault node in optical transmission network to avoid breakdown of whole network communication. It can automatically switch by detecting the nodes optical power or signal failure. Therefore to ensure that traffic from an LSP traversing a neighboring router can continue to reach its destination even if the neighboring router fails.

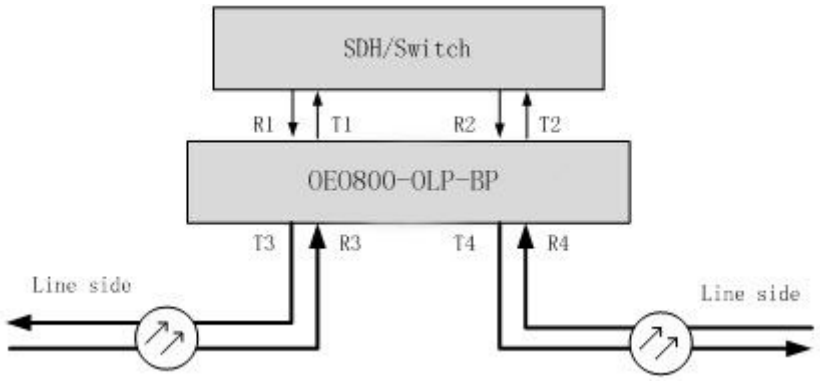


Fiberstore's FS-OBP-C is a node protection card. It can be installed into FS-P-OTP800 series transport platform for more capacity solution in limited environment. The FS-OBP-C will bypass the unpowered switch and simply pass network traffic to the next switch in the relay. It is widely used in PDH, SDH, C/DWDM, power communication and CATV systems for optical monitoring.

Specifications

Items	Parameters
Operating Wavelength	1310±50nm and 1550±50nm
Monitoring Range of Optical Power	＋23～-50 dBm
Monitoring Accuracy of Optical Power	±0.5 dB
Monitoring Resolution of Optical Power	±0.01 dB
Return Loss	≥45 dB
Polarization Dependent Loss	≤0.1 dB
Wavelength Dependent Loss	≤0.2 dB
Insertion Loss	<1.5 dB
Switching Time	<15ms
Service Life	$>10^7$ times
Operating Temperature	-10～+50 ℃
Storage Temperature	-20～+75 ℃
Power-down State	Switch to the standby channel.
Optical Interface	SC/PC or SC/APC

Application

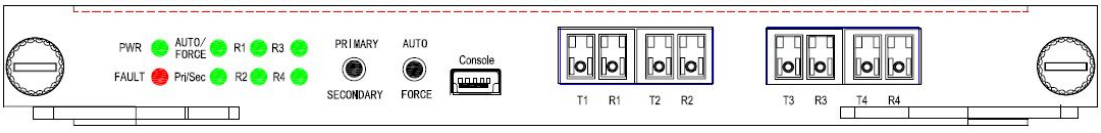


Functions and Features

The FS-OBP-C board achieves the bypass protection.

Functions and Features	Description
Basic Function	The FS-OBP-C board achieves the bypass protection.
Protection Schemes	When the performance of the optical fiber declines, the system will automatically switch the service from the main channel to the standby channel according to the optical power received from the receiver.

Front Panel



Indicator Light

Indicator Light	Meaning	Status	Description
PWR	Power Supply Indicator	On	Normal power supply is achieved.
		Off	The power supply is abnormal or the board is not powered on.
FAULT	Working Status	On	The board works abnormally and alarm occurs

	Indicator		to service.
		Off	The board works normally and there is no alarm.
Auto/Force	Mode Status Indicator	On	Automatic operating mode
		Off	Manual work mode
Pri/Sec	Line Status Indicator	On	Work on the primary path.
		Off	Work on the secondary path.
R1		On	Optical signals are received from Port R1.
		Off	Optical signals are not received from Port R1
R2		On	Optical signals are received from Port R2.
		Off	Optical signals are not received from Port R2.
R3		On	Optical signals are received from Port R3.
		Off	Optical signals are not received from Port R3.
R4		On	Optical signals are received from Port R4.
		Off	Optical signals are not received from Port R4.

Interfaces and Buttons

There are six optical interfaces and two buttons on the front panel of the FS-OBP-C board. The detailed information about the interfaces and buttons is shown in the following table:

Interfaces and Buttons	Interface Type	Description
T1	LC	Interface to transmit signals on the east of the equipment side.
R1	LC	Interface to receive signals on the east of the equipment side.
T2	LC	Interface to transmit signals on the west of the equipment side.
R2	LC	Interface to receive signals on the west of the equipment side.
T3	LC	Interface to transmit signals on the east of the line side.
R3	LC	Interface to receive signals on the east of the line side.
T4	LC	Interface to transmit signals on the west of the line side.
R4	LC	Interface to receive signals on the west of the line side.
Console		Interface for the serial command line management.
Auto/Force		Auto/Forced-mode switch button
Primary/Secondary		Click to select the primary or the secondary path under the manual mode.

Valid Slots

The FS-OBP-C occupies one slot.

Valid Slots in the Sub-racks

a.In the FS-P-OTP800-2S, valid slots are Slot 1 and Slot 2

b. In the FS-P-OTP800-4S, valid slots are Slot 2 and Slot 4

c. In the FS-P-OTP800-11S, valid slots are Slot 2 and Slot 10

FiberStore U.S.
331 Andover Park East Ste330,
Tukwila, WA 98188, United States
Tel: +1-253-277-3058
Fax: +1-253-246-7881

FiberStore Hong Kong
1220 Tung Chun Commercial Centre,
438-444 Shanghai Street, Kowloon,
HongKong
Tel: (852) 8120 3582
Fax: (852) 8120 3582

FiberStore China
Eastern Side, Second Floor, Science & Technology Park, No.6, Keyuan Road, Nanshan District, Shenzhen, China
Tel: +86 (755) 8300 3611
Fax: +86 (755) 8326 9395

Addresses, phone number and fax number also have been listed at www.fiberstore.com. Please e-mail us at sales@fiberstore.com or call us for assistance.