

TAPstack Series - Cost-Effective Family of TAP to improve network visibility in less space

TAPSTACK SERIES

The TAPstack Series is a family of Passive and Secure Fiber Optic TAPs, designed to enable rapid, effective access to live traffic traversing high-speed optical fibre networks links for network monitoring, analysis and cyber-security applications.

The Optical Fiber Bypass (FOB) Switch, a key component, is an industrial-grade solution with 4 duplex LC or SC connectors, supporting 2-channel duplex or 4-channel simplex fiber connections. It automatically redirects optic network traffic to prevent link failure during power loss, allowing for the replacement or removal of the local network switch without causing downtime.

The LGX box seamlessly fits into a 1RU rack-mounted device, accommodating up to three LGX modules. The range includes models for both multimode (MMF) and singlemode fiber (SMF) with data rates up to 400G. The Optical Fiber Bypass Switch is suitable for critical optical networks, such as power substations, transportation hubs, surveillance systems, railway monitoring, com munication systems, and factory automation, where fiber link failures are not tolerated.

FEATURES

- Supports 100M up to 400G
- Available with LC/UPC connectors
- available in Single-Mode or Multimode
- LED indicators for Power and optical switch status
- Bypass switch time <8ms
- Low insertion Loss
- Low power consumption <1W
- Dual Power Input for High Availability
- LED indicators for Power and optical switch status

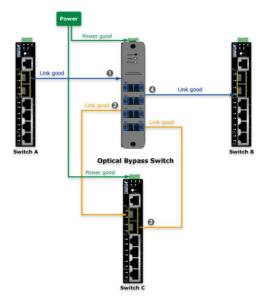


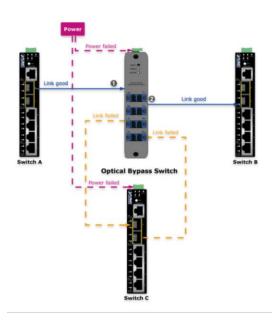


Deployment and Operation Mode

- 1- Two of the fiber ports are used to connect to two remote fiber switches and the other two fiber ports are used to connect to the local fiber switch. The OFB switch and the local fiber Ethernet switch (or security tool) are powered from the same power source.
- 2- When the system power is on, the OFB switch operates in the Normal mode and forwards Ethernet packets between two remote fibre switches and the local fibre switch.
- 3- When the system power failure occurs, the OFB switch operates in the Bypass mode that directly forwards the Ethernet packet between two remote fibre switches and bypass the local fibre switch.
- 4- Once the system power is recovered, the network traffic resumes operation between two remote fibre switches and a local fibre switch.

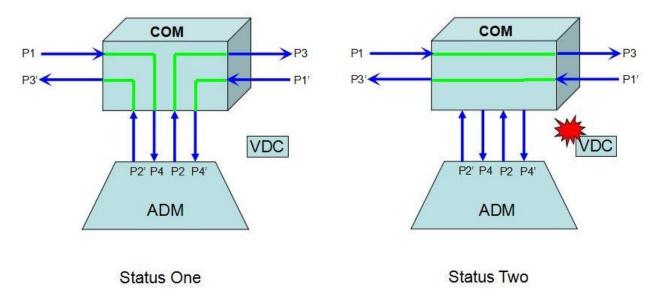
Operation	Power	Optical Traffic Route
Mode	Source	
Normal Mode	Power on	OFB Switch forwards packets between two remote network switches and the local switch
Bypass Mode	Power loss	OFB Switch directly forwards packets between two remote network switches and bypass the local switch







To force the Bypass Mode, the OFB switch must be connected to a Switched PDU (normally comes with remote management/control ON/OFF)



Power Supply

Port	Indicator	LED	Status
PWR1	DC 12-48V	PWR1/DC 12-48V	ON/OFF indicated by LED
PWR2	AC 220V	PWR2/AC 220V	ON/OFF indicated by LED



Technical specifications

Wavelength Range	nm	850±40	1260~1650	
Operating Wavelength	nm	850	1310/1550	
Insertion Loss	dB	Typ:1.0 Max:1.5	Тур:1.0 Мах:1.5	
Return Loss	dB	MM≥30 SM≥50		
Crosstalk	dB	MM≥35 SM≥55		
PDL	dB	≤0.05		
WDL	dB	≤0.25		
TDL	dB	≤0.25		
Repeatability	dB	≤±0.02		
Power supply	V	DC: 12-48V; AC:220V		
Power Consumption	W	<2.5		
Lifetime	Time	≥10 ⁷		
Switch Time	ms	≤8		
Transmission Power	mW	≤500		
Operating Temperature	°C	-5~+70		
Storage Temperature	°C	-5~+85		
Operating Humidity	%RH	5∼85		
Storage Humidity	%RH	5∼85		
Weight	g	510		
Dimension	mm	(L)140.0×(W)95.0×(H)26.0		





Ordering Information

Part Number	Description (other split ratios are available)	Connector
EN-OFB1L-MMF	TAPstack Optical Fiber Bypass Switch MMF, LC, Duplex Link,	LC/UPC
	LGX module	
EN-OFB1L-SMF	TAPstack Optical Fiber Bypass Switch SMF, LC, Duplex Link,	LC/UPC
	LGX module	
EN-CWDM-RCK1U	MOBstack 1RU Chassis w/t 3 slots available.	LC/UPC





Notice:

E.C.I. Networks reserves the right to make changes to or discontinue any optical link product or service identified in this publication, without notice, to improve design and/or performance. Applications that are described herein for any of the optical link products are for illustrative purposes only.

For further information



Office: 1-800-967-1672

Fax: 1-855-201-7283

mailto:sales@ecin.ca

www.ecin.ca

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