

VIAVI

ONMSi RFTS: High Density Optical Switch 48 Ports for VIAVI RFTS Solutions

Enable high capacity, remote fiber test for PON and Point to Point networks

This high-density optical switch is optimized for remote fiber testing in dense networks with high fiber count cables and many FTTP service points in PON and DAA/DWDM networks. The high capacity enables rapid test port expansion as the network grows to remotely characterize fiber, troubleshoot, and monitor large fiber networks with a VIAVI RFTS system or test head.

The small form factor cascade-able 48 ports switch enables test expansion of up to 1488 fibers from a single VIAVI optical test head (FTH-5000 or FTH-9000). Network Operators can rapidly test and monitor many fibers remotely from a single point, such as an exchange with a fully automated, cost-effective solution.

As part of a centralized solution, fibers are tested with an approved method of procedure (MOP) and test results are captured automatically during network construction, service activation and monitoring. Ensure that no degradation goes undetected after the fibers are commissioned by comparing baseline health to subsequent remote OTDR tests.

- VIAVI rackmount single mode 1x48 switch allows a common input fiber to switch to any one of 48 output fibers.
- Cascade up to 31 switches to increase the switch capacity to 1488 fibers.
- This new high density optical switch 48 port is compatible with VIAVI Fiber Test Head family (FTH-5000, FTH-9000) for remote fiber construction, activation, and monitoring.

Features

- High port density, high speed switching
- Compact 1/3 1 RU with flexible configurations
- Low power consumption
- Powered from Fiber Test Head
- No IP address required
- Exceptional durability
- Cascade enabled for up to 31 switches
- MPO lock to protect connector ports

Applications

- Fiber construction, activation and recertification
- Fiber monitoring
- Tapping/intrusion detection
- Fault demarcation



Specifications (typical at 25°C)

General	
Dimensions	Designed for 1/3 1RU (44mm)
	Depth: 223.10 mm
	Height: 42.50 mm
	Length: 146 mm
	Weight: <1.4kg
Operating temperature	0°C to +60°C
Storage temperature	-20°C to +60°C
Humidity	5% to 90% without condensing
EMI/ESD	EN 61326-1 :2013 compliant, class A
	FCC 47CFR Part 15: 2017 compliant, class A
Interfaces	RS485
Power consumption in active mode	<0.5 W
Power consumption in low power mode	<0.2 W
Optical Specifications	
Number of Ports	48 ports + one common port
Operating Wavelength Range	1270 nm - 1670 nm
Insertion Loss (excluding connectors)	< 1.2 dB from 1600 nm to 1670 nm
	< 1.6 dB from 1528 nm to 1600 nm
	< 1.9 dB from 1500 nm to 1528 nm
	< 2.1 dB from 1480 nm to 1500 nm
Return Loss with connectors	>50 dB
Repeatability	- 0.05 dB to + 0.05 dB
Durability	2.5 Billion cycles
Connector Type	Common Port : LC/APC
	Output ports: MPO-12 male
Description	Part Number
High Density Optical Switch of 48 ports MPO-12 Connectors	E9H-X48MPO
MPO Connector Locker for HDOS 48 ports MPO bloc	E9H-MPO48-LOCK