# VIAVI
## High Port Density 144 Port Optical Switch For VIAVI RFTS Solutions

### Enable High Capacity Remote Testing

This high port density 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 and use cases are adopted to remotely characterize fiber, troubleshoot and monitor large fiber networks with a VIAVI RFTS system or test head. The small form factor cascade-able 144 port switch enables test expansion of up to 4464 fibers from a single VIAVI optical test head (OTU or OTH). 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 when a baseline is compared to subsequent remote OTDR tests.

- VIAVI rackmount single-mode 1x144 switch allows a common input fiber to be switched to any one of 144 output fibers.

- Cascade up to 31 switches to increase the switch capacity to 4464 fibers.

- The 144 optical switch is compatible with VIAVI optical test unit family (OTU-8000, OTU-5000) for remote fiber characterization and monitoring.

## Key Features

- High port density, high speed
- Low power consumption
- No IP address required
- Powered from the fiber test unit
- Exceptional durability
- Versatile rack mounting to fit a large range of rack enclosures
- Cascade enabled for up to 31 switches

## Applications

- Fiber characterization
- Fiber test on demand for construction, activation, recertification
- Fiber monitoring
- Tapping/intrusion detection
- Fault demarcation
- Fiber health reporting

## Specifications – (typical at 25°C)

| General | |
|---|---|
| Dimensions | Height: 1RU (44mm)<br>Width: 19"<br>Depth: 183.2, 197.8 or 274.7mm according to brackets positions |
| Operating temperature | **-5 to 50°C** |
| Storage temperature | **–20 to 85°C** |
| Humidity | 5% to 90% without condensing |
| EMC | CE Compliant – FCC Part 15 Compliant |
| Interfaces | RS485 |
| Power consumption in active mode | <0.7 W |
| Power consumption in low power mode | <0.25 W |
| **Optical specifications** | |
| Number of Ports | 144 plus one common port |
| Operating Wavelength Range | C-Band, L-Band, and U-Band ranges |
| Insertion Loss with one pair of connectors | <2.9 dB |
| Return Loss with connectors | >50 dB |
| Repeatability | +/-0.05 dB |
| Durability | 1 Billion switch times |
| Connector Type | LC/APC |

| Description | Part Number |
|---|---|
| 144 Ports Optical Switch | E98OSX144 |

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