

## Optical Switching Equipment: FW2600-16OS14-MP

### 16-Group 1×4 (4×1) SM, 1310/1550nm, MPO16/APC, 1U Chassis

**FW2600-16OS14-MP** rack-mount optical switching equipment consists of 16 units of 1×4 optical switches. It enables controllable optical path switching for selecting one MPO16 optical interface out of four MPO16 optical interfaces (4-to-1 selection or 1-to-4 switching). The unit supports flexible network management: switching can be configured via a graphical web-management GUI over the RJ45 Ethernet port, or controlled by upper-level hosts through program commands.

An optical switch routes, switches and selects optical signals directly in the optical domain without any-to-electrical-to-optical conversion. It supports optical-path protection switching, dynamic scheduling and multi-channel selection. It is widely deployed in optical communications, AI computing, test & simulation, optical sensing and other applications.

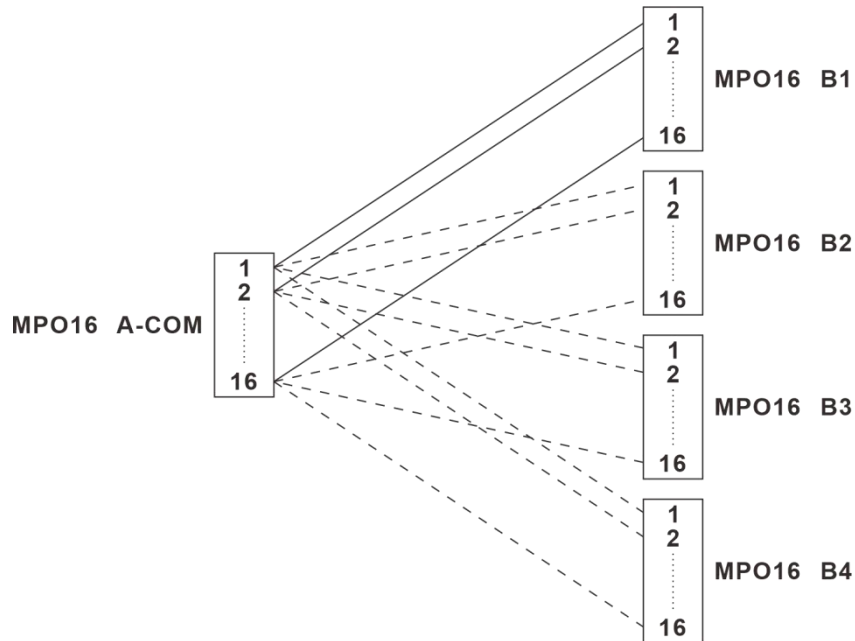
### Product Features

- Low insertion loss and fast switching speed.
- Controlled via Ethernet interface with networking capability. Multiple units can be centrally managed through a graphical interface for simple and convenient operation.
- LCD display for intuitive viewing of user name and IP address.
- Transparent transmission of compliant incoming optical signals.
- Compatible with single-mode fiber types: G.652, G.653, G.655, G.657.
- Power-off memory (latching) function.

## Performance Specifications

| Item                              | Parameter                                          |
|-----------------------------------|----------------------------------------------------|
| Model                             | FW2600-16OS14-MP                                   |
| Operating Wavelength              | SM: 1260-1620nm                                    |
| Test Wavelength                   | 1310nm / 1550nm                                    |
| Insertion Loss                    | $\leq 1.5$ dB                                      |
| Repeatability                     | $\leq \pm 0.02$ dB                                 |
| Return Loss                       | $\geq 50$ dB                                       |
| Crosstalk                         | $\geq 55$ dB                                       |
| Wavelength-Dependent Loss (WDL)   | $\leq 0.25$ dB                                     |
| Polarization-Dependent Loss (PDL) | $\leq 0.05$ dB                                     |
| Temperature-Dependent Loss (TDL)  | $\leq 0.2$ dB                                      |
| Switching Time                    | $\leq 12$ ms                                       |
| Service Lifetime                  | $\geq 10^7$ cycles                                 |
| Fiber Type                        | Single-Mode (9/125 $\mu$ m)                        |
| Optical Connectors                | COM-A: MPO16/APC (Female); B1-B4: MPO16/APC (Male) |
| Management Interface              | RJ45                                               |
| Fault Protection                  | Power-off memory (latching)                        |
| Power Supply                      | AC: 110-260 V                                      |
| Operating Temperature             | -10 °C ~ +60 °C                                    |
| Storage Temperature               | -40 °C ~ +85 °C                                    |
| Chassis                           | 19-inch standard 1U rack-mount (482 × 390 × 44 mm) |

## Optical Path Diagram



## Switching Logic

Port A can connect to any one of ports B1, B2, B3 and B4. Only one path is active at any time.

- State 1: MPO16 A ↔ MPO16 B1
- State 2: MPO16 A ↔ MPO16 B2
- State 3: MPO16 A ↔ MPO16 B3
- State 4: MPO16 A ↔ MPO16 B4

### Notes:

1. Port A is MPO16/APC female, and must mate with MPO16/APC male cables. Ports B1-B4 are MPO16/APC male, and must mate with MPO16/APC female cables. Use single-mode 16-fiber patch cords.
2. This device is **not compatible** with MPO8 / MPO12 optical interfaces.

## Device Description

### Front-Panel Layout



1. LAN1 / LAN2: RJ45 Ethernet ports for device management communication
2. LCD display: Shows device address and status information
3. Next: Scroll-down navigation button
4. Reset: Reset button
5. RUN indicator: Device operation status LED
6. Con: Console debug port
7. User optical interfaces: Five MPO16-APC optical ports

## Rear-Panel Layout



1. AC power inlet: AC power input connector

## Device Dimension Drawing

