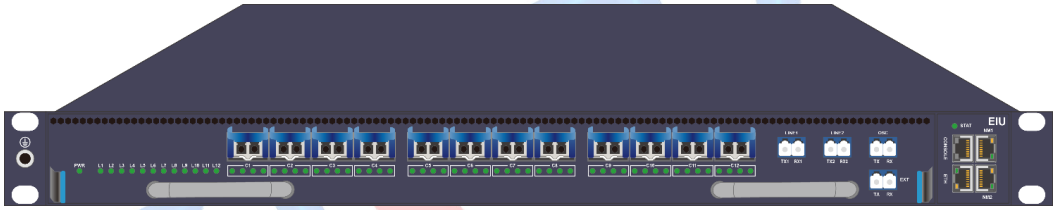
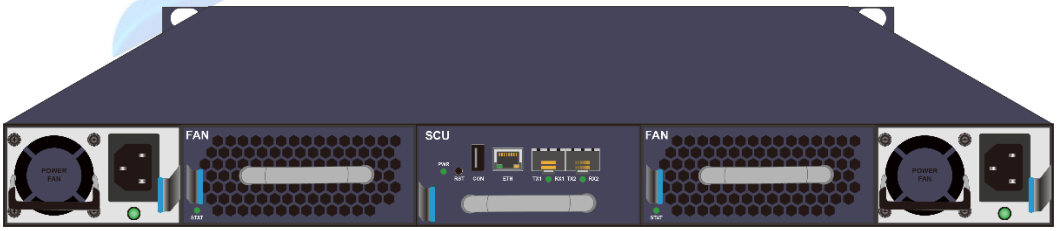
# OTNS8600P 400G Integrated DWDM Equipment

The OTNS8600P integrated wavelength division equipment developed by Guangzhou Sintai Communication Co., Ltd. for data center interconnection (DCI) scenarios has the outstanding characteristics of large capacity, small size, low energy consumption, and cost-effective performance. The device is only 1RU and supports a maximum transmission capacity of 4.8 Tbps (12 * 400G). Through device cascading, it can be smoothly expanded to a transmission capacity of 19.2Tbps per fiber. The device adopts high-density optoelectronic integration technology to avoid complex fiber jump connections. It is a switch-like one-connection and easy to form an end-to-end complete wavelength division transmission solution, bringing ultra-large transmission capacity, perfect matching of the installation conditions of the data center room, and a very simple management mode, bringing the ultimate user experience to the DCI bearer network in the metropolitan area.




OTNS8600P 400G integrated DWDM equipment front view

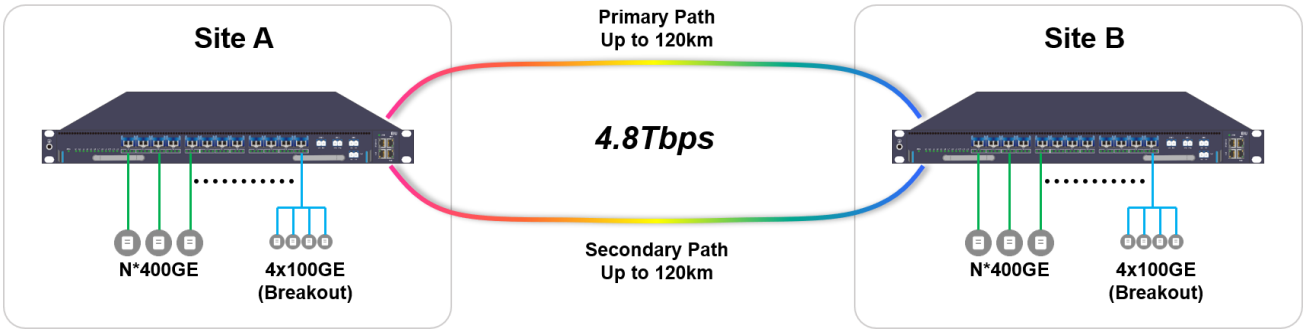



OTNS8600P 400G integrated DWDM equipment rear view

## Features

- 1U rack-mount modular design, all components are pluggable, including service card, main control card(SCU), power supply card, fan card, optical module, etc. The failure of the main control card(SCU) will not affect the business.
- One unit of the device provides 12*400G QSFP-DD client-side interfaces. Each 400G interface can support 4x100G through breakout mode.
- The capacity is customized on demand, with a minimum configuration of one 400G interface. Optical modules can be added to the redundant interfaces to achieve a maximum transmission capacity of 4.8T for a single device.
- It provides expansion interfaces and supports device stacking, which can effectively expand the transmission capacity to 19.2T per fiber.
- Supports 100GE and 400GE service access, service upgrades, and equipment replacement-free, protecting investment.
- Supports 0~120km transmission distance, and the link budget can reach 30dB (without line protection).
- Supports 1+1 line protection on the optical cable side (optional), automatically selects transmission routes, and improves network reliability.
- Supports in-band optical supervisory channel (OSC), remote device management can be achieved as long as the optical path is connected.
- There is no complicated optical-electrical cross-connection, services are transmitted transparently, and service ports are completely physically isolated, which improves network security.
- Supports Web and B/S network management and provides open SNMP interface.
- Supports line-side optical power monitoring, WDM-side bit error rate and OSNR monitoring, and client-side Ethernet performance monitoring.
- Front-to-back air outlet design, 1+1 fan unit configuration, hot-swappable.
- AC/DC power supply, dual server power supply configuration, hot-swappable, and 1+1 hot backup using Load Share mode.

## Application Scenario



## Product Specifications

| Function | | Description |
|---|---|---|
| Device size | Dimensions (H x W x D) | 1U: 44 mm × 442 mm × 490 mm |
| | Maximum capacity | 4. 8T bit/s (400G*12CH) |
| | Applicable cabinet | 19- inch cabinet 800mm or more depth |
| Client-side port | | 12*400G QSFP-DD optical ports are pluggable |
| Supported service types | | 400GE, 100GE (supported via breakout mode) |
| Loopback | | Support WDM side and client-side loopback |
| LLDP | | Receive only (rxonly) mode |
| Performance monitoring | | ● Line-side optical power performance monitoring<br>● WDM side OSNR, FEC, CD and other performance monitoring<br>● Client-side Ethernet layer performance monitoring |
| Line side | | 2 Dual-fiber LC interfaces<br>(Line side interface 2 is invalid when there is no optical line 1+1 protection) |
| Transmission distance | | Adapt to 0~120km transmission distance |
| Extension interface | | 1 Dual-fiber LC interface, supporting device cascading expansion to dual-fiber transmission 19.2Tbps |
| Network-level protection | | Support 1+1 protection for optical lines **(Optional configuration)** |
| Network management | | ● Support hot swap of main control card<br>● Support single-device Web network management<br>● Support centralized network management system based on B /S architecture<br>● Support DCN communication based on OSC<br>● Provide open SNMP interface |
| Power supply | Backup | Standard CRPS power supply 1 +1 backup |
| | AC | ● Rated voltage range: 100V AC ~ 130V AC (50/60Hz)<br>200V AC ~ 240V AC (50/60Hz)<br>● Maximum voltage range: 90 V AC ~ 264 V AC (45Hz ~65Hz) |
| | High Voltage DC | ● Rated voltage range: 2 - 40 V HVDC<br>● Maximum voltage range: 192 V HVDC to 288 V HVDC |
| | DC | ● Rated voltage range: -48 V DC / -60 V DC<br>● Maximum voltage range: -40 V DC to -72 V DC |
| Power consumption | | < 550W (full configuration) |
| Heat dissipation | | Front airflow and rear airflow, 1+ 1 fan card backup |
| Environment | Operating temperature | Short term: -5 ℃～+ 45 ℃/ Long term: 0 ℃～ 40 ℃ |
| | Storage temperature | -40 ℃～+ 70 ℃ |
| | Humidity | 5%～ 95 % (no condensation) |