

OTNS8600-DCI4: 1U DCI Platform

The OTNS8600-DCI4 is an optoelectronic integrated WDM transmission platform designed for data center interconnection(DCI) by Guangzhou Sintai Communication Co., Ltd., features high integration(optoelectronic integration), large bandwidth(25.6Tbits/Fiber), simple deployment(free of complex tuning and testing), easy operation and maintenance(CLI /Web LCT / SNMP/ NETCONF /NMS), security and reliability. It can meet the rapidly growing bandwidth demand among DCs, realize flexible deployment of equipment, create an open optical network architecture, and lead the DCI market into a new era of high-speed all-optical interconnection.



OTNS8600-DCI4

Product features

- Adopt optoelectronic integrated, pluggable modular design; components support hot-plugging, deploy and expand on demand.
- Cooling design of front-in and back-out airflow, 1+1 FRU fan unit and supports automatic speed adjustment.
- 19-inch / 800mm depth cabinet installation, suitable for data center server room, can be deployed with IT equipment in the same cabinet.
- Transmission capacity of each fiber pair is up to 25.6Tbit/s@Ultra-wide C-band 400G*80λ/800G*40λ, up to 6.4Tbit/s per subrack.
- Single wave capacity up to 800G, towards 1.2T&1.6T continuous evolution.
- Highly integrated optical layer board of OA, WSS, VOA, OSC, OTDR, OCM, and OLP, etc. to simplify internal fiber connections.
- Support 10GE, 25GE, 40GE, 100GE, 100GE FlexE(Unware), 400GE, STM-64, 10GE_WAN, FC800, FC1600, FC3200, OTU2, OTU2e, OTU4 and other service access.
- Support 9-degree ROADM networking with Flexible Grid.
- Support comprehensive performance monitoring of service layer, OTN layer and optical layer with quality visibility.
- Provide a variety of multi-layer network-level and device-level protection schemes, protection reversal delay is less than 50ms, ensuring superior protection performance.
- Supports CLI, Web LCT and GUI management platform based on B /S architecture, SNMP, NETCONF/YANG standard open interfaces.

Product specification

Parameter		Description
Chassis	Dimensions(H x W x D)	1U: 44mm(height) x 444mm(width) x 490mm(depth)
	Maximum capacity	6.4Tbit/ s
	Number of service	4
	Applicable cabinet	19-inch cabinet 800mm or more depth
Line-side port	Rate	<ul style="list-style-type: none"> ● 100G(PDM_QPSK) ● 200G(PDM_QPSK) / 200G(PDM_8QAM) / 200G(PDM_16QAM) ● 300G(PDM_8QAM) ● 400G(PDM_16QAM) / 400G(PDM_QPSK) ● 800G(PDM_16QAM)
	Optical module	Pluggable wavelength tunable QSFP28/QSFP-DD/CFP2/OSFP
Client-side port	Service type	10GbE, 25GbE, 40GbE, 100GbE, 100GbE FlexE(Unware), 400GbE, STM-64, 10GbE_WAN, FC800, FC1600, FC3200, OTU2, OTU 2e, OTU4
	Optical module	Pluggable SFP+/SFP28/QSFP28/QSFP-DD
Optical power management		ALS, AGC
Maximum number of wavelengths		Fixed grid: 120 waves@50 GHz
Channel spacing		Fixed grid: 50GHz/75GHz/100GHz/150GHz Flexible grid: 6.25GHz slice
Center frequency range		190.7THz ~ 196.65THz
Central wavelength range		1524.5nm ~ 1572.06nm
Protection function		<ul style="list-style-type: none"> ● Optical Line Protection(OLP) ● Optical Multiplex Section Protection(OMSP) ● Optical Channel Protection(OCHP) ● 1+1 Protection within the board(supported by P422 muxponder)
Network management		<ul style="list-style-type: none"> ● Support hot swap of main control board(SCU) ● Support CLI, Web LCT, SNMP, NETCONF and GUI management platform based on B /S architecture ● Supports DCN communication based on OSC
Power supply	Backup	Standard CRPS power supply 1 +1 backup
	AC	<ul style="list-style-type: none"> ● Rated voltage range: 100V AC ~ 130V AC(50/60Hz) / 200V AC ~ 240V AC(50/60Hz) ● Voltage range: 90 V AC ~ 264 V AC(45Hz ~65Hz)
	HVDC	<ul style="list-style-type: none"> ● Rated voltage range: 2-40 V HVDC ● Maximum voltage range: 192V HVDC to 288V HVDC
	DC	<ul style="list-style-type: none"> ● Rated voltage range: -48V DC / -60V DC ● Maximum voltage range: -40V DC to -72V DC
Heat dissipation		Front-to-back airflow, 1+ 1 fan board backup
Typical power consumption		<550W(standard)
Environment	Operating temperature	Short term: -5°C~+ 45°C; Long term: 0°C~40°C
	Storage temperature	-40°C~+70°C
	Humidity	5%~95%(no condensation)

SCU: System Control Unit

The system main control unit board(SCU) launched by Sintai Communication is responsible for providing the interface between the system and the network management system, coordinating with the network management system to manage each board of the equipment, and realizing mutual communication between devices, completing the processing of corresponding overhead and optical monitoring channels.



Features

- Supports main control board 1+1 redundancy, automatic and manual main control switching.
- Supports hot-plugging and hot-swapping of the main control board without any impact on the business.
- After the dual main control board fails, the device can continue to work normally. The new main control board can passively obtain all configurations of all functional units without affecting the normal operation of the device.
- The original configuration will not be lost after the device is powered down, and the configuration will be restored automatically after it is powered up; when service boards, fans, etc. are unplugged and replaced with the same type of boards, the main control will automatically send the configuration of the original boards to the new boards.
- Provides main control board operation status indicator, main and standby status indicator.
- Provides command line-based CLI control method, Web LCT -based management and control, GUI management and control platform based on B /S architecture, SNMP, NETCONF/YANG open API interface.
- Support remote online upgrade, provides USB interface to support on-site software upgrade, log export and other functions.

Product specifications

System Control Unit(SCU)		
Protection function	Support main control 1+ 1 backup(Only 2U DCI platform)	
Network management method	<ul style="list-style-type: none"> ● Support CLI command line management ● Support Web LCT management ● Support GUI management platform based on B /S architecture ● Supports DCN communication based on OSC ● Supports SNMP, NETCONF/YANG open API interfaces 	
Environment	Operating temperature	Short term: -5°C~+45°C; Long term: 0°C~40°C
	Storage temperature	-40 °C~+ 70°C
	Humidity	5%~95%(no condensation)