

DCI/OTN Platform: OTNS8600-DCI8 2U

OTNS8600-DCI8 is an optoelectronic integrated WDM transmission platform designed for Data Centre Interconnect (DCI) by Guangzhou Sintai Communication Co., Ltd, features high integration (optoelectronic integration), large bandwidth (25.6Tbits / Fiber), simple deployment (no complicated tuning), easy operation and maintenance (NETCONF / YANG) and safety and reliability. It can meet the rapidly growing bandwidth demand between DCs, achieve 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.

Product view



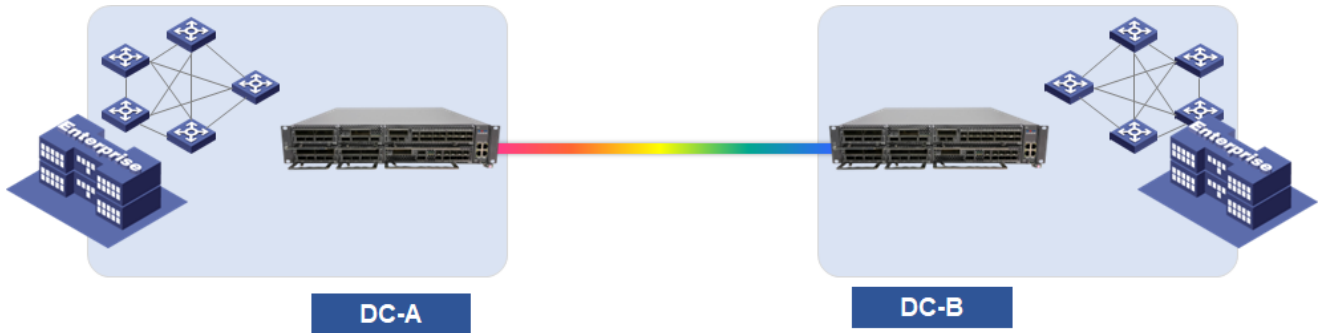
OTNS8600-DCI8

Product features

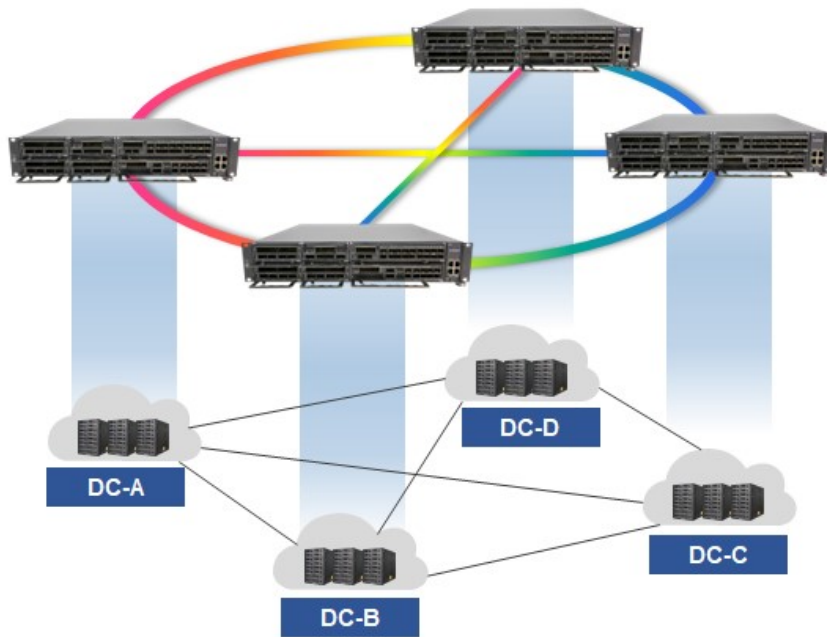
- Adopt optoelectronic integrated, pluggable modular design; components support hot-plugging, deploy and expand on demand.
- Front inlet air and rear outlet air cooling design, 2+1 FRU fan units available, automatic speed adjustment supported.
- 19" / 600mm Depth cabinet can be installed, suitable for data center rooms and can be deployed with IT equipment in common cabinets.
- Transmission capacity up to 25.6Tbit/s per pair @ C+ band 400G*64λ, up to 3.2Tbit/s per subrack.
- Single wave capacity up to 400G, continuous evolution towards 600G & 800G & 1.2T.
- Optical layer card highly integrated with OA, WSS, VOA, OSC, OTDR, OCM, OLP, etc. to simplify internal fiber connectivity.
- Supports 10GE, 100GE, 100GE FlexE(Unaware) , 400GE, STM-64, 10GE_WAN, FC800, FC1600, FC3200, OTU2, OTU2e, OTU4 and other service access.
- Supports 9-degree ROADM networking and FlexGrid.
- Supports comprehensive performance monitoring and quality visibility at the service, OTN and optical layers.
- Provides multiple multi-layer network-level and device-level protection solutions. Protection reversal delay < 50ms, ensuring superior protection performance.
- Supports SNMP, NETCONF/YANG standard open interface and GUI management platform based on B/S architecture.

Application scenarios

Small network: single platform with high density optical layer card + electrical layer card for point-to-point networks.



Medium / large network: stacking of multiple electrical layers + multi-degree ROADM to form a ring network.



Product specifications

Parameter		Description
Chassis	Dimensions (H x W x D)	2U: 88 mm (H)×446 mm (W)×450 mm (D)
	Maximum capacity	3.2Tbit/s
	Number of service card slots	8
	Applicable cabinets	19" cabinet 600mm or deeper
Line-side port	Rate	<ul style="list-style-type: none"> ● 100G (PDM_QPSK) programmable ● 200G (PDM_QPSK) programmable ● 200G (PDM_8QAM) programmable ● 200G (PDM_16QAM) programmable ● 300G (PDM_8QAM) programmable ● 400G (PDM_16QAM) programmable
	Optical module	Pluggable QSFP28 / QSFP-DD / CFP2, wavelength adjustable
Client-side port	Service type	10GE, 100GE, 100GE FlexE(Unware) , 400GE, STM-64, 10GE_WAN, FC800, FC1600, FC3200, OTU2, OTU2e, OTU4
	Optical module	Pluggable SFP+ / SFP28 / QSFP28 / QSFP-DD
Optical power management		ALS, AGC
Max. number of wavelengths		Fixed grid: 96 wavelengths @50 GHz
Channel spacing		Fixed grid: 50 GHz / 75 GHz / 100 GHz / 150 GHz
Central frequency range		191.35 THz ~ 196.1 THz
Central wavelength range		1528.77 nm ~ 1566.73 nm
Protection function		<ul style="list-style-type: none"> ● Optical line protection (OLP) ● Optical multiplexed segment protection (OMSP) ● Optical channel protection (OCHP) ● Line-side port 1+1 protection (only P422 muxponder support)
Network management		<ul style="list-style-type: none"> ● Supports main controller 1+1 backup (optional) ● Support CLI, Web LCT, SNMP, NETCONF, GUI management platform based on B/S architecture ● Support DCN communication based on OSC
Power supply	Back-up	Standard CRPS power supply 1+1 backup
	AC	<ul style="list-style-type: none"> ● Rated voltage range: 100 V AC~130 V AC (50/60Hz) or 200 V AC~240 V AC (50/60Hz) ● Max. voltage range: 90 V AC~264 V AC (45Hz~65Hz)
	HVDC	<ul style="list-style-type: none"> ● Rated voltage range: 240 V HVDC ● Max. voltage range: 192 V HVDC~288 V HVDC
	DC	<ul style="list-style-type: none"> ● Rated voltage range: -48 V DC/-60 V DC ● Max. voltage range: -40 V DC~-72 V DC
Heat dissipation		<ul style="list-style-type: none"> ● Front inlet air and rear outlet air ● 2+1 Fan unit backup
Typical power consumption		<800W (Electrical layer full match)
Environment	Operating temperature	Short-term: -5℃~+45℃; Long-term: 0℃~40℃
	Storage temperature	-40℃~+70℃

Parameter		Description
	Humidity	5%~95% (no condensation)

System Control Unit: SCU

The system control unit (SCU) also known as main controller card introduced by Sintai Communication is to provide the interface between the system and the network management system, cooperating with the network management system to manage the various single boards of the equipment, and realizing the mutual communication between the equipment to complete the processing of the corresponding overhead and optical monitoring channels.

Product view



Function features

- Support dual main control board 1+1 redundancy, and support automatic and manual switching of the main control.
- Support hot-plugging and this action has no impact on the service.
- After the failure of dual main controller, the device can continue to work normally, and the new on-line main controller can passively obtain all the configurations of all functional units, and doesn't affect the normal operation of the device.
- The original configuration will not be lost after the device is powered down, it will be restored automatically after powered up; when the service boards, fans, etc. are pulled out and replaced with the same type of boards, the main controller will automatically send the configuration of the original boards to the new boards.
- Provide main controller board operation status indicator, main and standby status indicators.
- Provide command-line based CLI control.
- Provide Web-based LCT control.
- Provide GUI control platform based on B/S architecture.
- Provide SNMP, NETCONF/YANG open API interface.
- Support remote online upgrade
- Provide USB interface to support on-site software upgrade, log export and other functions.

Product Specification

SCU	
Protection function	Support main controller 1+1 backup
Network management	<ul style="list-style-type: none"> • Support CLI command line management. • Support Web LCT management • Support GUI management platform based on B/S architecture • Support OSC-based DCN communication • Support SNMP, NETCONF/YANG open API interface
Environment	Operating temperature
	Storage temperature
	Humidity level

- Short term: -5°C ~ +45°C
- Long term: 0°C ~ 40°C
- 40°C ~ +70°C
- 5% ~ 95% (no condensation)

NMS system based on B/S architecture

