

## **Product Brochure**

Huawei OptiXtrans E6616(OSN 1800 V Pro)

Huawei OptiXtrans E6616 is a highly-integrated all-optical transport platform designed for enterprises. The OptiXtrans E6616 can be widely used in industries such as energy, electric power, transportation, education, and finance that are crucial to national economy and people's livelihood.

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### **Product Highlights**

# **Convergence and Simplification: Simplified Liquid OTN Leads the Next-Generation OTN Evolution**

- 64k 100GE ultra-broadband service access and convergence of multiple technologies, meeting various service requirements of industries
- Unified access and bearing of all-granularity services, bringing more service connections, higher bandwidth efficiency, and lower latency

# Ultra-Large Capacity: Future-Proof Bandwidth Growth, Device Capacity Upgrade, and Ultra-High Bandwidth

- Up to 2.8T OTN capacity per subrack and up to 200G per slot, greatly improving electrical-layer capabilities
- Highly integrated optical-layer ROADM, providing multiple functions and improving the grooming capability to 20 degrees

### Intelligent O&M: iMaster NCE Enables Full-Lifecycle Automation

- Real-time performance visualization and big data analysis for network sub-health, shifting from reactive O&M to proactive O&M
- OD/FD-based optical-layer visualization and online real-time monitoring

### **Product Specifications**

Item		Description	
Dimensions (H x	D x W, unit: mm)	222 x 220 x 442 (excluding mounting ears)	
Weight (empty chassis)		8 kg	
Installation mode		<ul><li>19-inch cabinet</li><li>ETSI 300 mm deep cabinet, such as A63B, and N63B</li></ul>	
Number of service board slots		<ul> <li>DC chassis: 14</li> <li>AC chassis: 12</li> </ul>	
Optical-layer cross-connect capacity		1 to 20-degree ROADM	
Electrical switching capacity	OTN	2.8 TGbit/s	
	TDM	Higher order: 140 Gbit/s; lower order: 20 Gbit/s	
Maximum	DWDM	80	
number of wavelengths	CWDM	8	
Center wavelength range		DWDM: 1529.16 nm to 1560.61 nm (C band, ITU-T G.694.1) CWDM: 1471 nm to 1611 nm (S+C+L band, ITU-T G.694.2)	
Maximum rate pe	er channel	200 Gbit/s	
Supported servic	e types	SDH/SONET, PDH, OTN, Ethernet, PCM, CPRI, SAN, video, and other services	
Line rate		2.5 Gbit/s, 10 Gbit/s, 50 Gbit/s, 100 Gbit/s, and 200 Gbit/s	
Supported pluggable optical/electrical modules		<ul> <li>Optical module: SFP/eSFP, XFP, SFP+, QSFP+, TXFP, CFP, CFP2, and QSFP28</li> <li>Electrical module: GE SFP</li> </ul>	
Network topology		Point-to-point, chain, star, ring, ring with chain, intersecting ring, tangent ring, and mesh networking	
Network-level protection (OTN)		Client 1+1 protection, intra-board 1+1 protection, ODUk SNCP, optical line protection, tributary SNCP, and LPT	
Network-level protection (TDM)		<ul> <li>SDH protection: SNCP, linear MSP, ring MSP, TPS, E1 SNCP, 64K SNCP, and hitless protection switching</li> <li>EoS protection: LAG, DLAG, LCAS, LPT, and STP/RSTP</li> </ul>	
Equipment-level protection		<ul> <li>Backup of cross-connect, system control, and clock units</li> <li>Power supply backup</li> <li>Fan redundancy</li> </ul>	
Optical power management		ALS, OPA, and IPA	
Maintenance		<ul> <li>ETH OAM (EoS)</li> <li>Port mirroring (EoS)</li> <li>Loopback</li> <li>PRBS</li> </ul>	
Easy O&M		Optical Doctor (OD) and Fiber Doctor (FD)	
Synchronization		Physical-layer clock (OTN+SDH)	

ltem		Description
		<ul> <li>IEEE 1588v2 (OTN)</li> <li>ITU-T G.8275.1/G.8273.2 (OTN)</li> </ul>
Standard working voltage		<ul> <li>DC power input</li> <li>Standard operating voltage: -48 V to -60 V</li> <li>Operating voltage range: -40 V to -72 V</li> <li>AC power input</li> <li>Standard operating voltage: 100 V to 240 V</li> </ul>
Installation mode		<ul><li>19-inch cabinet</li><li>ETSI 300 mm deep cabinet, such as N63E, N63B, and A63B</li></ul>
Equipment operating environment	Subrack temperature	<ul> <li>Long-term: -5°C to +50°C</li> <li>Short-term<sup>a</sup>: -10°C to +55°C</li> </ul>
	Subrack RH	<ul> <li>Long-term: 5% to 85%</li> <li>Short-term: 5% to 95%</li> </ul>
	ETSI standard	ETSI Class 3.1 NOTE The ETSI standards define the temperature and humidity environment of the equipment.
Reliability	System availability	0.9999965. The annual downtime is less than or equal to 2 minutes.
	Average annual repair rate	Lower than 1.5%
	Mean time to repair (MTTR)	4 hours
	Mean time between failures (MTBF)	129.63 years

a: A short term refers to a maximum of 96 consecutive hours and the total time of short-term operating in a year cannot exceed 15 days.

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