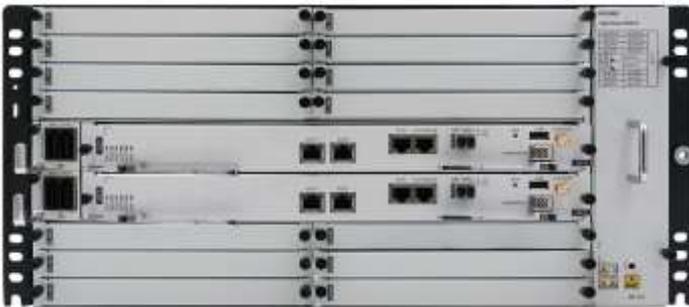# Product Brochure

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.

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		• 19-inch cabinet • ETSI 300 mm deep cabinet, such as A63B, and N63B
Number of service board slots		• DC chassis: 14 • AC chassis: 12
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 number of wavelengths	DWDM	80
	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 per channel		200 Gbit/s
Supported service 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		• Optical module: SFP/eSFP, XFP, SFP+, QSFP+, TXFP, CFP, CFP2, and QSFP28 • Electrical module: GE SFP
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)		• SDH protection: SNCP, linear MSP, ring MSP, TPS, E1 SNCP, 64K SNCP, and hitless protection switching • EoS protection: LAG, DLAG, LCAS, LPT, and STP/RSTP
Equipment-level protection		• Backup of cross-connect, system control, and clock units • Power supply backup • Fan redundancy
Optical power management		ALS, OPA, and IPA
Maintenance		• ETH OAM (EoS) • Port mirroring (EoS) • Loopback • PRBS
Easy O&M		Optical Doctor (OD) and Fiber Doctor (FD)
Synchronization		• Physical-layer clock (OTN+SDH)

Item		Description
		- IEEE 1588v2 (OTN) - ITU-T G.8275.1/G.8273.2 (OTN)
Standard working voltage		DC power input - Standard operating voltage: -48 V to -60 V - Operating voltage range: -40 V to -72 V AC power input - Standard operating voltage: 100 V to 240 V
Installation mode		- 19-inch cabinet - ETSI 300 mm deep cabinet, such as N63E, N63B, and A63B
Equipment operating environment	Subrack temperature	- Long-term: -5°C to +50°C - Short-term[a]: -10°C to +55°C
	Subrack RH	- Long-term: 5% to 85% - Short-term: 5% to 95%
	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.		