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# Huawei Enterprise WDM

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Portfolio



01

## OSN902



<b>Dimensions (H x W x D) (mm)</b>	86.1 x 442 x 600
<b>Cabinet</b>	19-inch cabinet
<b>Number of Slots for Service Boards</b>	6
<b>Service Type</b>	10GE, 40GE, 100GE, FC1600, and FC3200
<b>Supported Pluggable Optical Modules</b>	QSFP+, QSFP28
<b>Line Rate</b>	100G (PDM-QPSK) programmable 200G (PDM-16QAM) programmable
<b>Equipment-level Protection</b>	1+1 power supply backup, 2+1 backup for the fan tray assembly
<b>Network-level Protection</b>	Client 1+1 protection, intra-board 1+1 protection, and optical line protection
<b>Management Interfaces</b>	CLI/SNMP/U2000/NETCONF
<b>Nominal Working Voltage</b>	90V to 264V AC, 47 to 63 Hz 192V to 288V HVDC
<b>Heat Dissipation</b>	Front air inlet and rear air outlet
<b>Power Consumption</b>	1200 W (max.)
<b>Operating Environment (Temperature)</b>	0°C (32°F) to 40°C (104°F)
<b>Operating Environment (Relative Humidity)</b>	5% to 95%

# 02

## OSN 1800



### 1800 II Compact

<b>Dimensions (H x W x D) (mm)</b>	88 x 442 x 220
<b>Cabinet</b>	<ul style="list-style-type: none"><li>• ETSI 300-mm deep cabinet, such as N63E and N63B</li><li>• 19-inch cabinet or 19-inch open rack</li><li>• F01S300 cabinet (only when working with F3SCC)</li></ul>
<b>Number of Slots for Service Boards</b>	DC-powered chassis: 7 AC-powered chassis: 5
<b>Optical Switching Capability</b>	1-degree to 9-degree ROADM
<b>Electrical Switching Capability</b>	Inter-board: Any services at a rate lower than 1.25 Gbit/s and 10GE LAN services. Intra-board: Any services at a rate lower than 2.5 Gbit/s VC-4/VC-12 and ODUk(k=0, 1, 2, flex) services
<b>Wavelength Range and Max. Number of Wavelengths</b>	DWDM: 1529.16 nm to 1560.61 nm (Band-C, ITU-T G.694.1), 80 wavelengths CWDM: 1471 nm to 1611 nm (Band S+C+L, ITU-T G.694.2), 8 wavelengths
<b>Service Type</b>	SDH/SONET, PDH, OTN, Ethernet, CPRI, OBSAI, SAN, video
<b>Line Rate</b>	2.5G/10G/100G/200G
<b>Supported Pluggable Optical Modules</b>	SFP/eSFP, XFP, SFP+, QSFP+, TXFP, CFP, CFP2, QSFP28
<b>Equipment-level Protection</b>	Power supply redundancy, fan redundancy
<b>Network-level Protection (OTN)</b>	Optical line protection, intra-board 1+1 protection, client 1+1 protection, ODUk SNCP, SW SNCP and LPT
<b>Synchronization</b>	OTN: physical clock, IEEE 1588v2, ITU-T G.8275.1/G.8273.2 TDM: SDH synchronization clock, synchronous Ethernet clock
<b>Nominal Working Voltage</b>	-48V/-60V DC 110V/220V AC
<b>Operation Environment (Temperature)</b>	Long-term operation: -5°C (23°F) to 55°C (131°F) Short-term operation: -10°C (14°F) to 55°C (131°F)
<b>Operation Environment (Relative Humidity)</b>	Long-term operation: 5% to 85% Short-term operation: 5% to 95%



## 1800 II Enhanced



## 1800 V

<b>Dimensions (H x W x D) (mm)</b>	88 x 442 x 220	221 x 442 x 224
<b>Cabinet</b>	<ul style="list-style-type: none"> <li>• ETSI 300-mm deep cabinet, such as N63E and N63B</li> <li>• 19-inch cabinet</li> </ul>	
<b>Number of Slots for Service Boards</b>	DC-powered chassis: 6	DC-powered chassis: 15 AC-powered chassis: 12
<b>Optical Switching Capability</b>	1-degree to 9-degree ROADM	1-degree to 9-degree ROADM
<b>Electrical Switching Capability</b>	OTN: 200G ODUk Packet: 160G TDM: 50G VC-4 20G VC-3/VC-12	OTN: 700G ODUk Packet: 700G TDM: 280G VC-4 40G VC-3/VC-12
<b>Wavelength Range and Max. Number of Wavelengths</b>	DWDM: 1529.16 nm to 1560.61 nm (Band-C, ITU-T G.694.1), 80 wavelengths CWDM: 1471 nm to 1611 nm (Band S+C+L, ITU-T G.694.2), 8 wavelengths	
<b>Service Type</b>	SDH/SONET, PDH, OTN, Ethernet, CPRI, OBSAI, SAN, video	
<b>Line Rate</b>	2.5G/10G/100G/200G	
<b>Supported Pluggable Optical Modules</b>	SFP/eSFP, XFP, SFP+, QSFP+, TXFP, CFP, CFP2, QSFP28	
<b>Equipment-level Protection</b>	Control, cross-connect, and clock integrated board redundancy Power supply redundancy Fan redundancy	



## 1800 II Enhanced

## 1800 V

<b>Network-level Protection (OTN)</b>	Optical line protection, intra-board 1+1 protection, client 1+1 protection, ODUk SNCP, tributary SNCP, and LPT	
<b>Network-level Protection (Packet)</b>	Tunnel APS, PW APS/FPS, LAG, ERPS, LPT, MRPS, LMSP, packet SNCP	Tunnel APS, PW APS/FPS, MC-PW APS, MC-LAG, LPT, LAG, ERPS, MRPS, LMSP, packet SNCP
<b>Network-level Protection (OCS)</b>	SDH protection: SNCP, linear MSP, and ring MSP EoS protection: LAG, DLAG, LCAS, LPT, and STP/RSTP	SDH protection: SNCP, linear MSP, ring MSP, and TPS EoS protection: LAG, DLAG, LCAS, LPT, and STP/RSTP
<b>Synchronization</b>	OTN: OTN clock, Synchronous Ethernet clock, IEEE 1588v2 Packet: Synchronous Ethernet clock, IEEE 1588v2 clock, G.8275.1 TDM: SDH clock, Synchronous Ethernet clock	OTN: physical clock, IEEE 1588v2, ITU-T G.8275.1/G.8273.2 TDM: SDH synchronization clock, synchronous Ethernet clock Packet: physical clock, IEEE 1588v2
<b>TSDN</b>	–	Supported
<b>Nominal Working Voltage</b>	-48V/-60V DC	-48V/-60V DC 110V/220V AC
<b>Operation Environment (Temperature)</b>	Long-term operation: -5°C (23°F) to 50°C (122°F) Short-term operation: -10°C (14°F) to 55°C (131°F)	
<b>Operation Environment (Relative Humidity)</b>	Long-term operation: 5% to 85% Short-term operation: 5% to 95%	

# 03

## OSN 9800



### OSN 9800 M24

<b>Dimensions (H x W x D) (mm)</b>	747.2 x 442 x 295
<b>Cabinet</b>	<ul style="list-style-type: none"><li>• ETSI 300-/600-mm deep cabinets, such as A63B</li><li>• 19-inch cabinet</li></ul>
<b>Number of Slots for Service Boards</b>	12 large slots or 24 small slots
<b>Electrical Switching Capability</b>	OTN: 100G x 24 ODUk TDM: 960G VC-4 80G VC-3/VC-12
<b>Wavelength Range and Max. Number of Wavelengths</b>	DWDM: 1529.16 nm-1567.13 nm (extended C-band, ITU-TG.694.1) Fixed grid: 96 wavelengths at a 50 GHz channel spacing
<b>Service Type</b>	SDH/SONET, Ethernet, SAN, OTN, and video
<b>Line Rate</b>	10G/100G/200G
<b>Supported Pluggable Optical Modules</b>	eSFP, SFP+, TSFP+, CFP, CFP2, QSFP28



## OSN 9800 M24

<b>Equipment-level Protection</b>	Cross-connect board redundancy, communication control and clock processing unit redundancy, power supply unit redundancy
<b>Network-level Protection (OTN)</b>	Client 1+1 protection, ODUk SNCP, tributary SNCP, intra-board 1+1 protection, LPT
<b>Network-level Protection (OCS)</b>	L MSP, Ring MSP, SNCP
<b>Synchronization</b>	Synchronous Ethernet, IEEE 1588v2
<b>Nominal Working Voltage</b>	-48V/-60V DC
<b>Operation Environment (Temperature)</b>	Long-term operation: 0°C (32°F) to 45°C (113°F); Short-term operation: -5°C (23°F) to 50°C (122°F)
<b>Operation Environment (Relative Humidity)</b>	Long-term operation: 5% to 85% Short-term operation: 5% to 90%



**OSN 9800 U32  
Standard**



**OSN 9800 U32  
Enhanced**

<b>Dimensions (H x W x D) (mm)</b>	1900 x 498 x 295	
<b>Cabinet</b>	ETSI 300-/600-mm deep cabinets, such as N63B and N66B	ETSI 300-/600-mm deep cabinets, such as A63B
<b>Number of Slots for Service Boards</b>	32	
<b>Electrical Switching Capability</b>	OTN: 12.8T ODUk Packet: 6.4T TDM: 2.56T VC-4 80G VC-3/VC-12	OTN: 32T ODUk
<b>Wavelength Range and Max. Number of Wavelengths</b>	DWDM: 1529.16 nm to 1567.13 nm (extended C-band, ITU-T G.694.1) Fixed grid: 80/96 wavelengths Flexible grid: configurable	
<b>Service Type</b>	SDH/SONET, Ethernet, SAN, OTN, and video	
<b>Line Rate</b>	10G/40G/100G/200G/400G	100G/200G/400G
<b>Supported Pluggable Optical Modules</b>	eSFP, SFP+, XFP, CFP, CFP2, CXP and QSFP28	



## OSN 9800 U32 Standard

## OSN 9800 U32 Enhanced

<b>Equipment-level Protection</b>	Power redundancy, fan redundancy, cross-connect board redundancy, communication control and clock processing unit redundancy	
<b>Network-level Protection (OTN)</b>	Client 1+1 protection, intra-board 1+1 protection, LPT, ODUk SNCP, tributary SNCP, and Port-level M: N protection	Client 1+1 protection, ODUk SNCP, tributary SNCP, intra-board 1+1 protection, LPT
<b>Network-level Protection (Packet)</b>	ERPS, LAG, LPT, MC-LAG, LMSP, MC-LMSP, MRPS, PW APS, MC-PW APS, and tunnel APS	–
<b>Network-level Protection (OCS)</b>	LMSP, Ring MSP, SNCP	–
<b>Synchronization</b>	OTN: Physical clock, IEEE 1588v2, and ITU-T G.8275.1 Packet: physical clock, IEEE 1588v2 TDM: SDH synchronization clock, synchronous Ethernet clock	Synchronous Ethernet clock
<b>ASON</b>	Electrical-layer ASON	–
<b>TSDN</b>	Supported	
<b>Submarine Features</b>	Supports application of extended C band in submarine scenarios.	
<b>Nominal Working Voltage</b>	-48V/-60V DC	
<b>Operation Environment (Temperature)</b>	Long-term operation: 5°C (41°F) to 40°C (104°F) Short-term operation: -5°C (23°F) to 45°C (113°F)	
<b>Operation Environment (Relative Humidity)</b>	Long-term operation: 5% to 85% Short-term operation: 5% to 90%	



## OSN 9800 UPS

<b>Dimensions (H x W x D) (mm)</b>	397 x 442 x 295
<b>Cabinet</b>	<ul style="list-style-type: none"><li>• ETSI 300-/600-mm deep cabinets, such as N63B and N66B</li><li>• 19-inch cabinet</li></ul>
<b>Number of Slots for Service Boards</b>	DC-powered chassis: 16 AC-powered chassis: 15
<b>Optical Switching Capability</b>	1-degree to 20-degree ROADM
<b>Wavelength Range and Max. Number of Wavelengths</b>	DWDM: 1529.16 nm to 1567.13 nm (extended C-band, ITU-T G.694.1) Fixed grid: 80/96 wavelengths Flexible grid: configurable
<b>Service Type</b>	SDH/SONET, Ethernet, SAN, OTN, and video
<b>Line Rate</b>	2.5G/10G/40G/100G/200G/400G
<b>Supported Pluggable Optical Modules</b>	eSFP, SFP+, XFP, CFP, CFP2 and QSFP28
<b>Equipment-level Protection</b>	Power supply redundancy , fan redundancy system control and communication board redundancy



## OSN 9800 UPS

<b>Network-level Protection (OTN)</b>	Optical line protection, intra-board 1+1 protection, client1+1 protection, and LPT
<b>Synchronization</b>	OTN: physical clock, IEEE 1588v2, and ITU-T G.8275.1 Packet: physical clock, IEEE 1588v2 TDM: SDH synchronization clock, synchronous Ethernet clock
<b>ASON</b>	Optical-layer ASON
<b>TSDN</b>	Supported
<b>Submarine Features</b>	Supports application of extended C band in submarine scenarios
<b>Nominal Working Voltage</b>	-48V/-60V DC 110V/220V AC
<b>Operation Environment (Temperature)</b>	Long-term operation: 5°C (41°F) to 45°C (113°F) Short-term operation: -5°C (23°F) to 55°C (131°F)
<b>Operation Environment (Relative Humidity)</b>	Long-term operation: 5% to 85% Short-term operation: 5% to 95%

## Huawei 3DLive+



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