

# Huawei OptiX OSN 500

## — STM-4/STM-1 Mini MSTP



The OptiX OSN 500 is STM-4/STM-1 mini MSTP. It supports transmission of TDM, Ethernet over SDH, Ethernet switching, and MPLS services, and applies to transmission

of 2G/3G/HSPA/LTE services on mobile network and private line. The OptiX OSN 500 adopts an energy-saving, maintenance-free, and highly integrated design.



Appearance of the OptiX OSN 500

## Energy-Saving Design for Green Environmental Protection

In the actual networks, a large quantity of mini MSTP equipment is used. The power consumption of them is quite considerable. The OptiX OSN 500 dynamically adjusts the power consumption, adopts the low-power-consumption chip developed by Huawei, and supports natural heat dissipation. With the typical power consumption of 20 W, the OptiX OSN

500 achieves the lowest power consumption among all the products with the same specifications in the communication industry.

RoHS/WEEE compliance, it is an EU Legal Directive for environment regulations concerning the restriction of use hazardous substances. Promote the lasting development of the environment.



Outdoor cabinet (water-proof, dust-proof, lightning-proof, with the ODF/DDF inbuilt)

## Maintenance-Free Design for Reducing the Cost

With all-round considerations given to the product design, the OptiX OSN 500 achieves the basically maintenance-free feature. The series products are deployed in scaled commercial use by more than 100 operators all over the world.

- Cleaning the air filter is not required. The OptiX OSN 500 does not have the fan. Hence, the maintenance personnel do not need to clean the air filter periodically.

- Site commissioning is not required. The OptiX OSN 500 is plug-and-play and supports in-service upgrade, thus implementing quick service activation.
- With all-round considerations given to the product design, the OptiX OSN 500 can tolerate abnormal situations such as high temperature, high humidity, and unstable voltage.
- Powerful fault diagnosis function. It

supports routine check by software and provides one-key data collection function, thus assisting the maintenance personnel in locating and clearing the equipment faults on the NMS.

## Small Size, Powerful Functions

- 1U high: The OptiX OSN 500 is only 1U high (44 mm) and can be easily inserted into the outdoor cabinet at the base station. Light weight: The OptiX OSN 500 weighs less than 5 kg. Hence, the maintenance personnel can insert and remove it easily.
- Multiple slots for flexible service expansion: The OptiX OSN 500 provides three slots. Its service expansion function is more flexible than the equipment with fixed configuration, thus effectively protecting the investment of the clients.
- High integrity, reducing the investment cost: One board of the OptiX OSN 500 provides two STM-4/STM-1 ports, 21 E1 ports, and eight FE ports.
- Ethernet transmission for flexible data grooming: The OptiX OSN 500 supports VC-12/VC-3 virtual concatenation groups, and thus implements lean operation at the smallest granularities. The OptiX OSN 500 supports the link capacity adjustment scheme (LCAS), the bandwidth utilization.
- Interconnection for transparent transmission of the NM information: The OptiX OSN 500 implements the communication of the NM information with the third-party equipment by using the OSI over DCC solution.
- Various protection schemes, improving the network reliability: The OptiX OSN 500 provides various protection schemes, such as multiplex section protection (MSP), subnetwork connection protection (SNCP), and 1+1/1:1 linear MSP.

## Specifications:

Performance Parameter	Product Specifications
Cross-connect capacity	<ul style="list-style-type: none"><li>• Higher order: 21.25G</li><li>• Lower order: 5G</li></ul>
Interface type	<ul style="list-style-type: none"><li>• 105xE1 services</li><li>• 24x10M/100M Ethernet services</li><li>• 6xSTM-1/STM-4 services</li><li>• 6xE3/T3 services</li><li>• 2xGE services</li><li>• EOW system</li></ul>
Protection scheme	<ul style="list-style-type: none"><li>• 1+1/1:1 linear MSP</li><li>• MSP</li><li>• SNCP</li></ul>
Dimensions	<ul style="list-style-type: none"><li>• 442 mm (width) x 220 mm (depth) x 44 mm (height)</li></ul>
Installation mode	<ul style="list-style-type: none"><li>• Installed in an ETSI 300 mm/600 mm cabinet</li><li>• Installed in a 19-inch cabinet</li><li>• Installed on the wall</li><li>• Installed on the desktop</li></ul>
Weight	<ul style="list-style-type: none"><li>• Not more than 5 kg</li></ul>
Power consumption	<ul style="list-style-type: none"><li>• 20 W (typical power consumption)</li></ul>
Heat dissipation	<ul style="list-style-type: none"><li>• No fan, natural dissipation</li></ul>
Power supply	<ul style="list-style-type: none"><li>• Standard power: -48 V to -60 V (working range: -38.4 V to -72 V)</li><li>• 220 V/110 V AC power</li></ul>
Working environment	<ul style="list-style-type: none"><li>• Temperature: -5°C to +55°C</li><li>• Humidity: 5% to 95%</li></ul>