### **OSP Platform Frame**





OSP-1200



OSP-2100



OSP-2200



OSP-5200

#### **Description**

OSP is a series of compact platform for subsystem, which is the basis for the integration of subsystem products. The platform support different function cards: EDFA, OEO, OLP, OLM, FEC, RFA, OCM, TDC, passive modules and other types of more than 20 types of cards, all function cards support hot swap during three platforms. OSP has high compact structure, flexible configuration and low power consumption, and supports the user interface of C/S architecture. It is easy to maintain and widely used in operators, power, radio and television, security and transmission. The platform can provide customers with a multi-service, multi-rate access platform, and can be combined with CWDM/DWDM wavelength division technology, ultra-long station from the transmission technology, OLP technology, OLM technology to provide customers with Communication one-stop solution.

### **OSP Platform Frame**



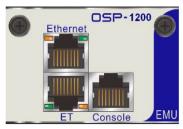
- Pluggable design, all boards can be flexibly matched
- Dual power supply design: dual -48V, dual 220V or -48V and 220V mixed power supply
- NMS does not occupy the service slot. It supports network management such as UDP, WEB, CLI, TLI, SNMP, and northbound interfaces
- Support all subcontracting solutions for products with rates of 200G, 100G, 10G, 2.5G and below rates for long/short distance transmission
- Support single-fiber, single-fiber bidirectional, dual-fiber two-way network, can form a chain, ring and other network topology
- Support optical maintenance channels, optical line protection, dispersion compensation, optical performance monitoring and other functions
- Support optical line monitoring OTDR, multi-channel optical switch, matrix optical power monitoring and other functions
- Support for long distance transmission products, can achieve a single span of 400km non-power relay service transmission

Optic and/or Electric Specification				
Parameter	Index			
	1200	2200	2100	5200
Dimensions	442 × 350 × 44mm	442 × 350 × 88 mm 442 × 320 × 220m		442 × 320 × 220mm
Installation Width	19 Inch, which can be 21 inches by replacing the mounting brackets			
Business Slots	4 standard slots	8 standard slots	2 standard slots	20 standard slots
Maximum Power Consumption	135W	200	)W	400W
Fan Card	Built-in one			
Power	Built-in dual power supply optional dual -48V DC, dual 220V AC, -48V DC and 220V AC			
Operating Temperature	-10 °C ~ 50 °C			
Storage Temperature	-20 °C ~ 80 °C			
Relative Humidity	5% to 95% non-condensing			

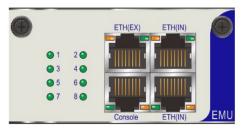
# OSP Element Management Unit (EMU) Card



#### **OSP EMU Card**



OSP-1200 EMU



OSP-2200 EMU



**OSP-5200 EMU** 

#### **Description**

The Element Management Unit (EMU) card provides a communication and control interface between various OSP Platform component modules and the main control card. The EMU employs a high-performance Power PC architecture embedded network-processing chip--and can be linked with additional EMU cards as the system scales.

- Pluggable design without occupying slot space
- Embedded chip design with real-time operating system
- Supports network management such as UDP, WEB, CLI, TL1, SNMP, and northbound interface

Optic and/or Electric Specification				
Downwater	Specifications			
Parameter	1200	2200	5200	
Ethernet Port	Network interface port for status monitoring			
Number of Ethernet Ports		1		
ET Port	Monitors slot status			
Number of ET Ports	1	2	2	
Console Port	The serial interface of the unit for factory debugging			
Number of Console Ports	1			
RS232 Port	Serial interface for factory debugging			
Number of RS232 Ports	_	_	1	
Interface Type	RJ45			
Maximum Power Consumption	5W			

# Optical Time Domain Reflectometer (ODTR) Card





**ODTR Card** 

#### **Description**

The OTDR card is an OSP Platform component that provides fiber optic cable fault location and performance including attenuation, loss, reflection and other optical parameters.

- Wide dynamic range
- High accuracy

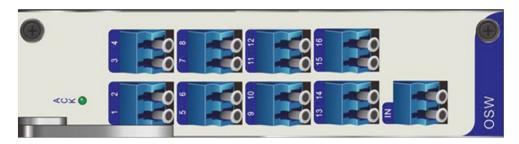
Optic and/or Electric Specification				
Parameter	Specifications			
Wavelength	1625nm ± 10nm			
Event Dead Zone	≤1m			
Attenuation Dead Zone	≤5m			
Dynamic Range	40/45dB			
Accuracy	$\pm 1$ m $\pm$ sampling resolution $\pm -10-5$ x distance			
Distance Resolution	0.05m			
Pulse Width	5ns~20us			
Power Consumption	<20W Operating temperature (-100C+ 500C)			
Card Width	2 standard slots			
Connector Type	LC/UPC			
Maximum Power Consumption	15W			

### **Optical SWitch (OSW) Card**

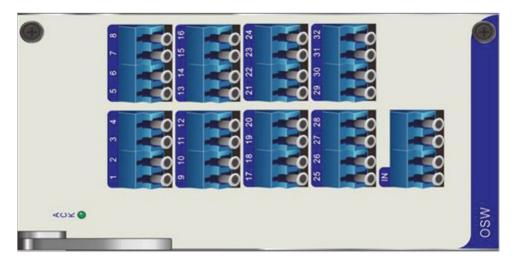




8 outputs OSW Optical SWitch Board



16 outputs OSW Optical SWitch Board



32 outputs OSW Optical SWitch Board

#### Description

The Optical SWitch Card (OSW) of the OSP Platform controls output routing through a variety of channels  $(1\times8, 1\times16, 1\times32, 1\times48)$  enabling the OTDR test signal to select different cores for the detection of optical fiber.

- Low insertion loss
- Fast switching

## **Optical SWitch (OSW) Card**



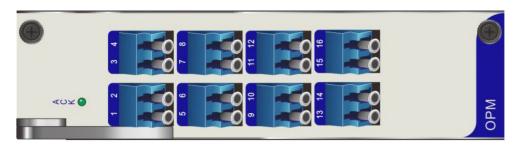
Optic and/or Electric Specification				
Parameter	Specifications			
Operation Wavelength	1550±20nm, 1625±20nm, 1650±20nm			
Insertion Loss	≤1.2 dB			
Number of Channels	8/16/32			
Return Loss	≥50 dB			
Switch Time	$\leq$ 25 + 15 $\times$ (n-1) ms (N is the number of switching channels)			
Carrying the Optical Power	≤500mW			
Card Width	8 channels (1 standard slot), 16 channels (2 standard slots), 2 channels (4 standard slots)			
Connector Type	LC/UPC			
Maximum Power Consumption	3W			

# Optical Power Meter (OPM) Card





8-Way OPM Power Meter Board



16-Way OPM Power Meter Board

#### **Description**

The OPM card is a component of the OSP Platform and consists of a multi-channel photodetector (8 channels and 16 channels) for real-time monitoring of line optical power values.

- Wide test range
- High accuracy

Optic and/or Electric Specification			
Parameter	Specifications		
Wavelength	1200nm ~ 1650nm		
Input Optical Power	-70dBm ~ 0dBm		
Resolution	0.01dB		
Return loss	≥45dB		
Channels	8/16		
Card Width	1 Standard Slot (8 channels) 2 Standard Slots (16 channels)		
Interface Type	LC/UPC		
Maximum Power Consumption	5W		