

# Apollo 9504D Stackable 1.6T DCI/DWDM Transmission Platform

Apollo 9504D is a stackable ultra-100G DWDM transmission platform for data center interconnection applications. The product has large transmission capacity, compact size, low power consumption, and fully meets the requirements of data center applications. It is suitable for both short-distance interconnection and long-distance transmission.

Apollo 9504D supports 100G and 10G clients, and on the line side it supports 100G, 200G, 400G interface. Based on an open software architecture, it provides various open control interfaces.



Front view



Rear view



## Physical Properties

| Property                                   | Description  |
|--|--|
| Dimension (mm)<br>(Height x Width x Depth) | 44.45mm (H) x 448mm (W) x 490mm (D)<br>1U height, 19" wide, with four pluggable electrical layer card slots, maximum capacity 1.6T |
| Suitable Cabinet                           | 19"  |
| Power Supply                               | 1+1 redundancy power supply<br>AC input: 100 ~ 240V, 47 ~ 63Hz<br>DC input: -40V ~ -72V  |
| Cooling Method                             | The air flow direction is from the front to the rear<br>1+1 fan module redundancy  |
| Working Environment                        | Working temperature: 0°C ~ 45°C<br>Memory storage temperature: -40°C ~ 70°C<br>Relative humidity: 10% ~ 90%, no condensation       |
| Maximum Power Consumption                  | 400W   |
| Out-band Management Interface              | 2 x RJ45 network port  |
| In-band Management                         | GCC0/1/2   |
| Open API                                   | SNMP/NETCONF   |

## Technical Specifications

### Service Card - M400L1C4

| Technical Feature                           | M400L1C4 Description  |
|---|---|
| Size  | Single-slot service card, four slots per chassis  |
| Client-side Interface                       | Each M400L1C4 service card supports four pluggable QSFP28-based 100G client ports, in total 16 100G client ports per chassis.   |
| Line-side Interface                         | Each M400L1C4 service card supports one pluggable 400G/200G CFP2 DCO coherent modules, in total four 400G/200G line-side ports. |
| Line-side Signal and Multiplexing Structure | 200G: OCh <-> OTUC2 <-> ODU2 <-> ODU4<br>400G: OCh <-> OTUC4 <-> ODU4 <-> ODU4  |
| Client-side Signal and Mapping Method       | 100GE <-> ODU4  |
| Line-side Modulation Format                 | 200G: 16QAM<br>400G: 16QAM  |
| FEC Mode                                    | 200G: SD-FEC<br>400G: SD-FEC  |

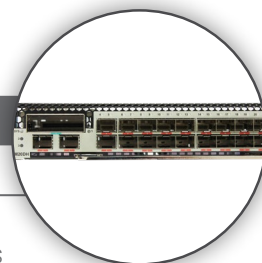


### Service Card - M200L2C4

| Technical Feature                           | M200L2C4 Description   |
|---|--|
| Size  | Single slot service card, four slots per chassis   |
| Client-side Interface                       | Each M200L2C4 service card supports four pluggable QSFP28-based 100G client ports, in total sixteen 100G client ports per chassis. |
| Line-side Interface                         | Each M200L2C4 service card supports two pluggable 200G/100G CFP2 DCO coherent modules, in total eight 200G/100G line-side ports.   |
| Line-side Signal and Multiplexing Structure | 200G: OCh <-> OTUC2 <-> ODU2 <-> ODU4<br>100G: OCh <-> OTU4 <-> ODU4   |
| Client-Side Signal and Mapping Method       | 100GE <-> ODU4   |
| Line-side Modulation Format                 | 200G: 16QAM<br>100G: DP-QPSK   |
| FEC Mode                                    | 200G: SD-FEC<br>100G: SD-FEC   |



Service Card - M200L1C20



| Technical Feature                           | M200L1C20 Description   |
|---|---|
| Size  | Two-slot service card, four slots per chassis   |
| Client-side Interface                       | Each M200L1C20 service card supports twenty pluggable SFP+ -based 10G client ports, in total forty 10G client ports per chassis |
| Line-side Interface                         | Each M200L1C20 service card supports one pluggable 200G/100G CFP2 DCO coherent modules, in total two 200G/100G line-side ports. |
| Line-side Signal and Multiplexing Structure | 200G: OCh <-> OTUC2 <-> ODU2 <-> ODU4<br>100G: OCh <-> OTU4 <-> ODU4 <-> ODU2/2e  |
| Client-side Signal and Mapping Method       | 10GE <-> ODU2/ODU2e<br>STM-64/OC192 <-> ODU2/ODU2e<br>OTU2/2e <-> ODU2/2e   |
| Line-side Modulation Format                 | 200G: 16QAM<br>100G: DP-QPSK  |
| FEC Mode                                    | 200G: SD-FEC<br>100G: SD-FEC  |

List of supported pluggable transceivers:

- OTR200P2\_CF
- OTR100Q28\_SR4/LR4
- OTPMR\_PI3
- OTR400P2\_CFA1
- OTP10\_SR/LR



Optical Card - MOA

| MOA-P16G20        |  |
|-------------------|--|
| Description       | Pre-amp: 16dBm EDFA, 15-25dB Gain  |
| Technical Feature | <ul style="list-style-type: none"> <li>• One-slot Optical Amplifier card with a built-in OSC monitor channel</li> <li>• Support integrated VOA, Support MON monitor interface</li> </ul>     |
| MOA-B20G12        |  |
| Description       | Booster: 20dBm EDFA, 9-15dB Gain   |
| Technical Feature | <ul style="list-style-type: none"> <li>• One-slot Optical Amplifier card with a built-in OSC monitor channel</li> <li>• Support VOA (External SFP), Support MON monitor interface</li> </ul> |

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