

*Photonic Sprinter*  
**MediaRouterX**



## Long-Distance Connection between Stadium and Studio

Optical packet transponder supporting 400G ZR/ZR+ and L2/L3 function are integrated. It enables long-haul, high-speed, and large-capacity transmission. Moreover, the box has an integrated PTP Grandmaster function for broadcast equipment for IP transmission.

### Key Features

#### ■ High Space Efficiency

One box offers optical packet transponder, L2/L3 routing function, and TC (Transparent Clock) and BC (Boundary Clock) functions for PTP-supported switch. With GNSS receiver, it also offers PTP Grandmaster Clock function.

#### ■ Large Capacity and Long-Haul Optical Communication

High performance QSFP-DD optical communication module (400G ZR/ZR+) with optical digital coherent technology realizes long-haul transmission of high-speed and large-capacity data, including uncompressed video.

#### ■ L2/L3 Routing

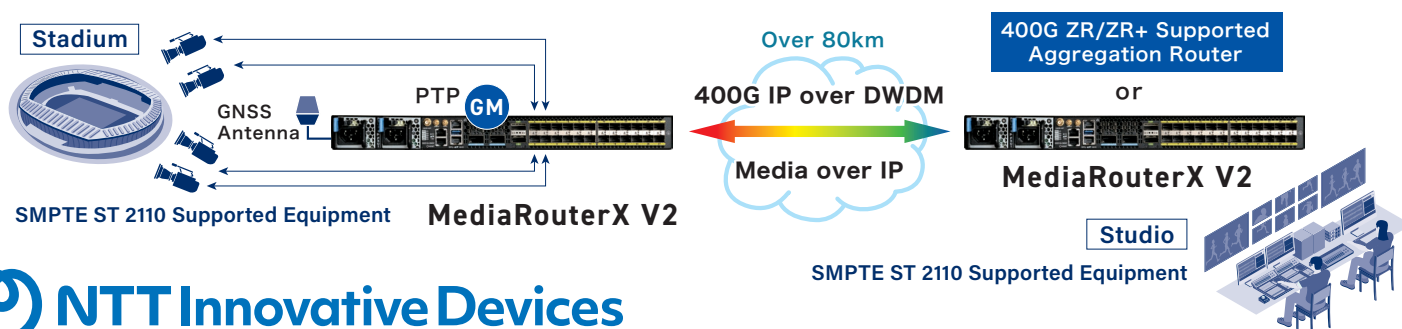
The box has a white box cell site router using the Broadcom Qumram2a chipset. With commercial network OS, it offers L2/L3 routing function. By adopting standardized technologies such as OIF, Open ZR+, and MSA, it achieves an economical 400G IP over DWDM with the integration of IP layer and optical layer.

#### ■ Other Functionality

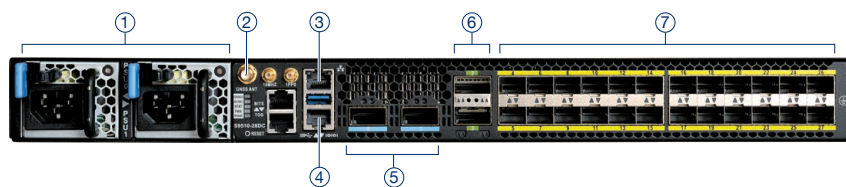
PTP function will support IEEE1588v2 and SMPTE ST 2059-2 profile.

### Application

#### Example: Remote Production Connecting Stadium and Production Studio



## Front Panel



## Rear Panel



- ① PSU 1+1
- ② GNSS antenna input
- ③ management port
- ④ console port
- ⑤ QSFP-DD x 2
- ⑥ QSFP28 x 2
- ⑦ SFP28 x 24
- ⑧ FAN module x 4+1



⑨ 400G-ZR/ZR+



⑩ Pluggable EDFA

## Specifications

## ■ Chassis (White Box Packet Transponder)

|                       |                                                                                                                                 |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Management Interface  | QSFP-DD 100G/400GbE (23W)× 2ports, QSFP28 40G/100GbE (5W)× 2ports<br>SFP28 10G/25GbE (2W)× 24ports, other (GNSS antenna IN × 1) |
| Management Interface  | Management port: 10/100/1000BASE-T (RJ-45)× 1, console port (RJ-45)× 1                                                          |
| Dimensions            | 1RU W:440 × D:302 × H:44 (mm) or less (w/o Connector, Foot, Rack mount bracket)                                                 |
| Weight                | 11kg typ.                                                                                                                       |
| Supply Voltage        | AC100 ~ 240VAC, 50/60Hz (Hot-swappable dual power supply)                                                                       |
| Power Consumption     | 400W max.                                                                                                                       |
| Operating Environment | 0 ~ 40°C , 30 ~ 80% (non-condensing)                                                                                            |
| Compliance            | RoHS, VCCI, CE, FCC, BSMI, CB, LVD, UL/cUL                                                                                      |

## ■ Network OS

| Model        | MediaRouterX D2       | MediaRouterX V2                              |
|--------------|-----------------------|----------------------------------------------|
| L2 Function  | YES (VLAN, STP, etc.) | YES (VLAN, STP, IGMP snooping, ERPS, etc.)   |
| L3 Function  | - (Not supported)     | YES (ARP, BGP, OSPF, etc.)                   |
| PTP Function | - (Not supported)     | YES (IEEE 1588-2008 AnnexJ, SMPTE ST 2059-2) |

## ■ DWDM option

## ● Pluggable Coherent Module (QSFP56-DD)

| Type           | 400G ZR (OIF 400ZR) | 400G ZR+ (OpenZR+ + MSA) |       |
|----------------|---------------------|--------------------------|-------|
| Operation Mode | 400ZR               | OpenZR+                  | 400ZR |
| Bps            | 400G                | 100/200/300/400G         | 400G  |
| FEC            | C-FEC               | O-FEC                    | C-FEC |

## ● Pluggable EDFA (QSFP28)

| Type                         | Booster Amplifier       | Preamplifier            |
|------------------------------|-------------------------|-------------------------|
| Input Range                  | -20 ~ 0dBm              | -30 ~ -10dBm            |
| Gain                         | 9 ~ 24dB (Nominal 17dB) | 9 ~ 24dB (Nominal 17dB) |
| Saturated Light Output Power | 17dbm                   | 7dbm                    |

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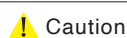
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**Caution**

Please use our products in accordance with the instructions provided in the manual, user's guide or specifications attached.