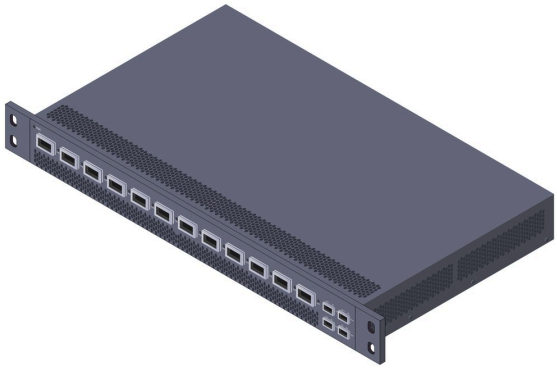
100G Integrated WDM Device



The 100G Integrated WDM Device is a box-type, high-density DCI transport platform for data centre interconnection. A single 1U unit delivers high-capacity transport, scaling further per fibre pair through device stacking. High-density optoelectronic integration avoids complex patch-fibre cabling and switch-style connections, forming an end-to-end wavelength-division link with a simple, plug-and-play management model, well suited to data-centre rooms and metro DCI bearer networks.

HIGHLIGHTS

High-density 1U box

Stackable box-type form factor, no rack space wasted, easy to relocate.

Mixed service transport

Transparent 40GE/100GE transmission, with service interfaces and counts customisable to order.

Drop-in network integration

No change to existing topology or optical layer design, just select the model for the required span/attenuation.

Zero-touch deployment

Delivered pre-configured, power-up free, plug-and-play, with no manual fibre patching.

1.2Tbps per device

12×100G in 1U, extendable to 2.4Tbps per fibre pair by stacking two units.

Isolated, secure ports

No complex optical/electrical crossover; each service port is physically isolated for network security.

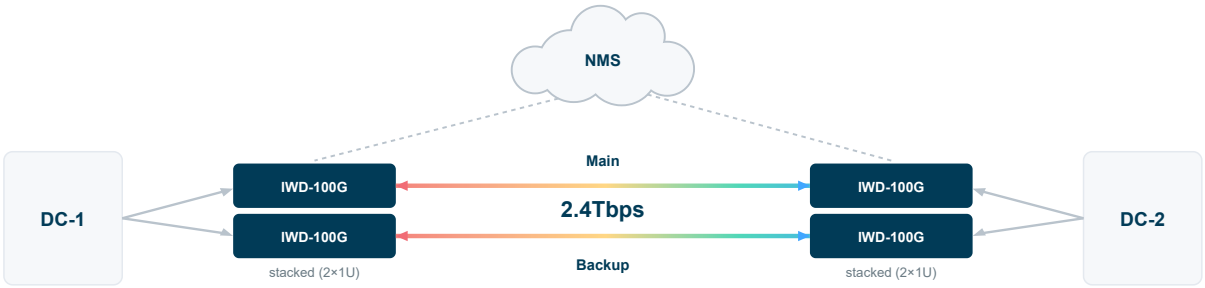
1+1 line protection

Automatic route selection on the fibre side for network reliability.

In-band SNMP management

In-band monitoring channel carries whole-network SNMP management over the optical path itself.

APPLICATION SCENARIO



Two stacked units per site combine Main and Backup fibres into a single 2.4Tbps protected link, managed in-band via NMS.

FORMAT

1U

SPECIFICATIONS

Capacity & Ports	
Maximum Capacity per Device	1.2Tbps (12×100G), 1RU
Maximum Capacity per Fibre	2.4Tbps, via 2×1RU device stacking
Maximum Rate per Port	100Gbit/s
Service Port Type	40G/100G QSFP optical port (fixed interface type)
Ports per Device	4, 8 or 12×QSFP optical ports, see Port Count table below
Supported Service Types	40GE, 100GE (per service port type)
Protection & Management	
Network-Level Protection	Line-side 1+1 protection with automatic route selection
Device-Level Protection	Power supply 1+1 hot backup (two-unit configurations) · 4× fan hot backup
Management Style	Web GUI · network management system (in-band SNMP)
Power & Mechanical	
Device Size	1U: 44mm (H) × 442mm (W) × 600mm (D)
Installation	19" server cabinet
Power Supply	1 or 2 hot-swappable units, 1+1 hot backup with load sharing · AC 90–260V · DC −36 to −72V · high-voltage DC optional
Heat Dissipation	Front and rear airflow, 4× hot-swappable fan units
Power Consumption	<400W (full load)
Operating Temperature	−5°C–50°C (typical)
Operating Humidity	5%–95%, non-condensing
Storage Temperature	−40°C–85°C

PORT COUNT

CODE	PORTS	AGGREGATE CAPACITY
4	4×QSFP (100G)	400Gbps
8	8×QSFP (100G)	800Gbps
12	12×QSFP (100G)	1.2Tbps

GRID

CODE	ITU-T GRID	ROLE
E	Even grid, 100GHz	Primary device on the fibre pair
O	Odd grid, 100GHz (offset 50GHz from Even)	Second device stacked on the same fibre pair, interleaved with the Even device for 50GHz spacing, doubling capacity

ORDERING INFORMATION

NAME	100G Integrated WDM Device
DESCRIPTION	100G Integrated WDM Device, box-type, high-density 1U DCI transport platform. QSFP ports at 40G/100G, scaling to 2.4Tbps per fibre via device stacking. Transparent 40GE/100GE service transport with physically isolated ports, 1+1 line protection with automatic route selection, in-band SNMP management, plug-and-play zero-touch deployment, hot-swappable AC/DC power, one or two units (1+1 redundant with two).
PART NUMBER	WDM-IWD-100G-**{Ports}**-**{Grid}**-**{PSU}**-1U

{Ports} 4 · 8 · 12, see Port Count table above, required

{Grid} E · O, see Grid table above, required — stack an E unit with an O unit on the same fibre pair to reach 2.4Tbps

{PSU}

CODE	MEANING
DC	One DC power supply unit
AC	One AC power supply unit
AD	One DC + one AC unit, mixed
2D	Two DC units, 1+1 redundant
2A	Two AC units, 1+1 redundant

Required. Two units (1+1) are recommended.