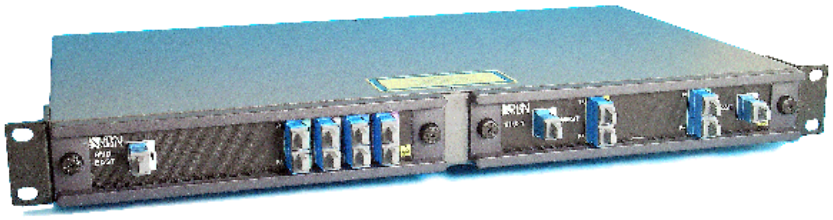
RBNi GigaEdge 6000™

- simple, cost-effective, carrier-class CWDM solutions

Small and simple yet flexible and powerful, the RBNi GigaEdge is your cost-effective Service Network solution for metro and access.



KEY FEATURES

Lower capex

- Low first-in and incremental cost meets carrier and enterprise need to match infrastructure cost to revenue
- Small footprint 1RU chassis with two slots for modular expansion
- ITU-T G.694.2 compliant filters interface to industry standard Small Form-factor Pluggable (SFP) and GBIC transceivers
- In GigaEdge 8200 ring and linear add/drop networks, enables low cost single lambda drops while retaining other 8200 network features.

Lower opex

- Integrates with existing CWDM network architectures
- High reliability – no electronic parts subject to failure mechanisms
- Consumes no power
- SFW option reduces fiber lease cost
- Supports 1310nm pass-through for GigaEdge 8200 OSC for remote management or legacy PDH transport applications
- Same platform deployable anywhere – building basements, computer rooms, riser systems, OSP cabinets (EH version) and telephone exchanges

The RBNi GigaEdge 6000 series passive CWDM filter products complement the GigaEdge 2330 mini-MSPP and GigaEdge 8200 CWDM products by enabling lower first-in cost and lower total network cost.

The 6000 series products support open CWDM networks and hybrid CWDM/DWDM network architectures. Client interfaces conforming to ITU-T G.694.2 CWDM wavelengths can be transported over single or dual fibre networks using the 6000 series products.

Up to 8 CWDM wavelengths in the S, C & L bands are supported on existing G.652 fibre with a 1310/CWDM filter option for older 1310nm services such as PDH. For new fibre applications such as FTTP, additional E-band CWDM wavelengths are supported in the future on G.652.C low water peak fibre.

The 6000 series comprises a 6010 multi-purpose 2-slot chassis into which a range of Dual Fibre Working (DFW) and Single Fibre Working (SFW) filter modules can be installed. The DFW and SFW module options support a wide variety of customer and application requirements. Environmentally Hardened (EH) versions are available.

The 62xx DFW modules include an 8 channel Mux/Demux, 4 channel OADM and 1-channel OADM. The 61xx SFW modules include a 4 channel Mux/Demux and 1-channel OADM with 1310nm pass-through for GigaEdge 8200 management support. A 6310 module is available for 1310/CWDM band splitting (eg, PDH applications) and a 6550 module supports hybrid CWDM/DWDM networks by splitting out the 1550nm C-Band wavelengths.

For CWDM applications requiring regeneration, the 61xx modules interface to the GigaEdge 8200 Reconfigurable OADM and 8100 Regen products – thus enabling much larger network sizes compared to other all-optical CWDM solutions.

GigaEdge 6010 Chassis

Schematic

GigaEdge 6110-1 and 6310 Modules

RBNi GigaEdge 6000 Series

SYSTEM

Customer services supported	All protocols up to 10 Gbit/s. PDH on 1310nm supported via GigaEdge 6310 filter module
Client CWDM interfaces	All-optical 6000 series networks support client interfaces with channelised CWDM optics complying to ITU-T G.694.2
Network topologies	Point-to-point, linear add/drop bus, ring or star Dual-fibre or single-fibre networks Hybrid CWDM/DWDM networks
Protection options	OADM filter modules with east and west ports support external client and optical layer protection switching options
Manage-ment support	All passive components do not require remote management 1310 OSC pass-through on 61xx OADMs support GigaEdge 8200 in-band management GigaEdge 2300 products with CWDM SFPs managed via DCC

Please contact RBN for further product information

PART Nos and OPTICAL Specs

6010	Universal Chassis (2 slot): 17.25" x 10.57" x 1.74" (W x D x H) - Blanking plates optional
6110	SFW OADM-1 (-1, -2, -3, -4 channel variants) 1.5dB add/drop loss, 1.5dB pass-through loss for CWDM, 2.7dB pass-through loss for 1310nm [1]
6140	SFW 4-Ch Mux/Demux (-1, -2 west/east variants) 3.0dB add/drop loss, 1dB port-port loss variance [1]
6210	DFW OADM-1 (-1, -2, -3, ….,-8 channel variants [2]) 1.5dB add/drop loss, 1.5dB pass-through loss [1]
6240	DFW OADM-4 (-1, -2 channel variants) 2.5dB add/drop loss, 2.35dB pass-through loss [1]
6280	DFW 8-Ch Mux/Demux 3.0dB add/drop loss [1]
6310	1310/CWDM Mux/Demux 1.25dB CWDM and 1.5dB 1310nm insertion loss [1]
6550	1550/CWDM Mux/Demux 2.0dB CWDM and 1.5dB 1550nm insertion loss [1]
Note 1	All filter loss specifications are maximum assuming an optical connector loss of 0.25dB / connector. All optical connectors are dual SC/PC. See detailed product specification sheets for PDL, PMD, isolation, directivity, ripple and return loss
Note 2	1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611 nm

ENVIRONMENTAL and MECHANICAL Specs

Operating Temperature Range	0^{o}C to +70^{o}C (-40 to +85^{o}C EH ver)
Relative Humidity	10% to 85% non-condensing
Storage Temperature Range	-40^{o}C to +85^{o}C
Chassis Dimensions (W x H x D)	17.25" x 1.74" (1RU) x 10.57"
Module Dimensions (W x H x D)	8.3" x 1.7" x 10.4"