RBNi GigaEdge 2330™

- simple, cost-effective, carrier-class mini-MSPP

Small and simple yet flexible and powerful, the RBNi GigaEdge 2330 is your cost-effective Service Network aggregation solution for metro and access.

KEY FEATURES

Lower capex

- Single platform supports flexible 4xANY standards-based multiplexing of SAN, Ethernet and SONET/SDH
- Four multi-protocol service ports in 1RU chassis
- SFP flexibility on client and aggregate ports
- Standardised multiplexing techniques enable interoperability with core SDH/SONET switches without 'book-ending' of proprietary multiplexers

Lower opex

- Integrates with existing network architectures
- Simplified network design and installation – "plug and play" for faster service provisioning
- All management and diagnostics remotely accessible
- No regularly scheduled hardware maintenance
- High availability, carrier-class solution
- Same platform deployable anywhere —building basements, computer rooms, riser systems and telephone exchanges
- Small size, low power consumption

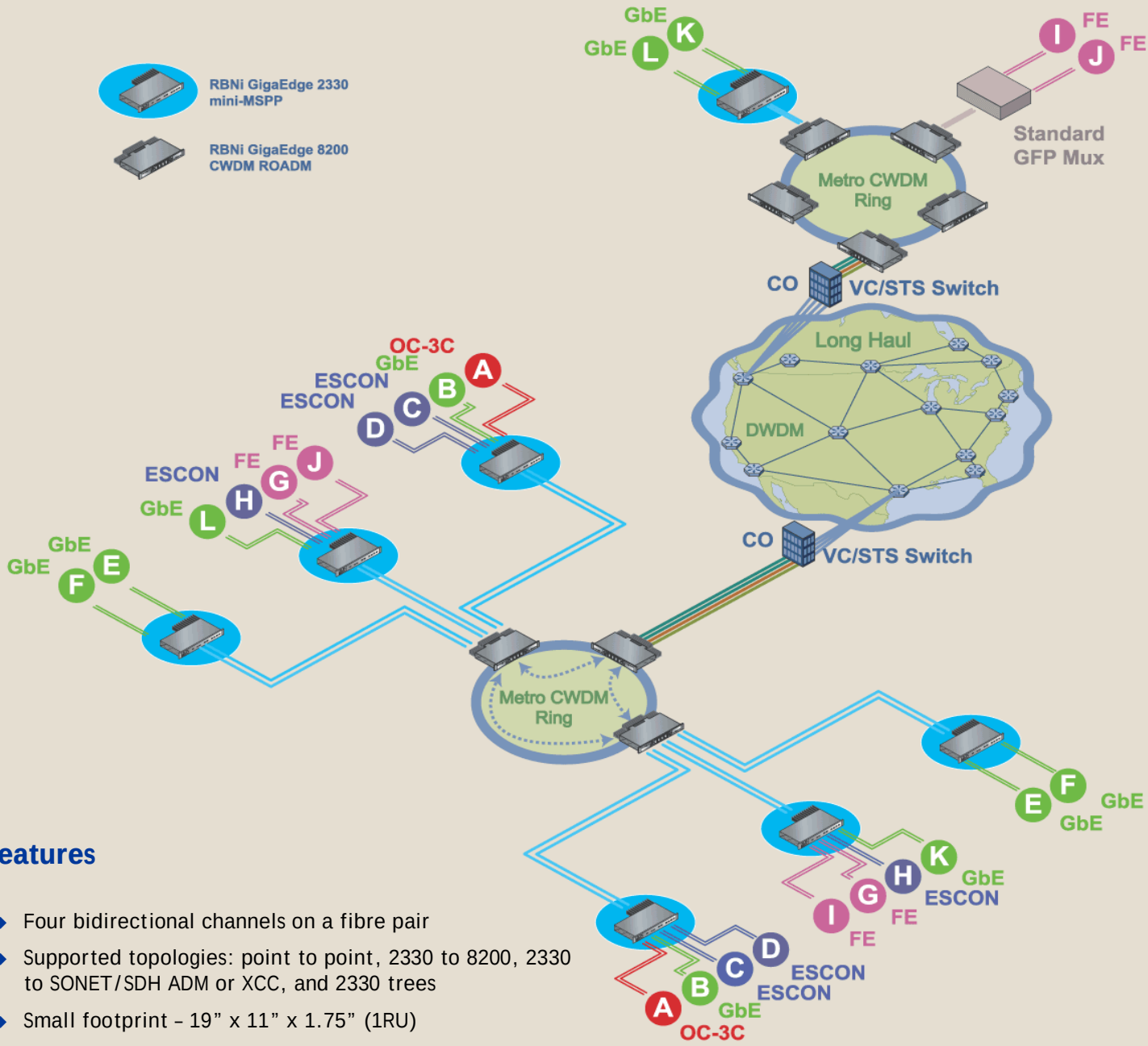
The RBNi GigaEdge 2330 multiplexes up to four SONET, SDH, SAN and Ethernet services onto a protected aggregate. It can be used in standalone point to point configuration, or as a service aggregator into a SONET, SDH or WDM network. The use of SFP optics and a flexible 4xANY service mix makes the 2330 the most versatile solution on the market.

The 1RU RBNi GigaEdge 2330 can multiplex up to 4xANY customer services onto a single fibre pair. When used in conjunction with the RBNi GigaEdge 8200, up to 32 services can be carried over a fibre pair. In either case, improved utilization of installed fibre base and increased service density reduces per service delivery costs.

Use of standards-based multiplexing techniques for SONET (GR-253-CORE), SDH (ITU-T G.707) and GFP (ITU-T G.7041) ensures that the RBNi GigaEdge 2330 interoperates seamlessly with a wide variety of SONET and SDH ADMs and cross-connects, thereby extending the reach of your Service Network and eliminating the need for 'book-ending' of proprietary multiplexers. Next-generation services can be converged with existing infrastructure to save costs and simplify network designs. Standards-based (ITU-T G.7712) DCC management capabilities have been implemented to further assist in integration with existing SONET and SDH network infrastructure.

The element control, monitoring and alarm features of the RBNi GigaEdge 2330 are seamlessly handled by the RBNi GigaCraft 1200 or easily integrated with an existing Network Management System using industry standard open interfaces.

RBN



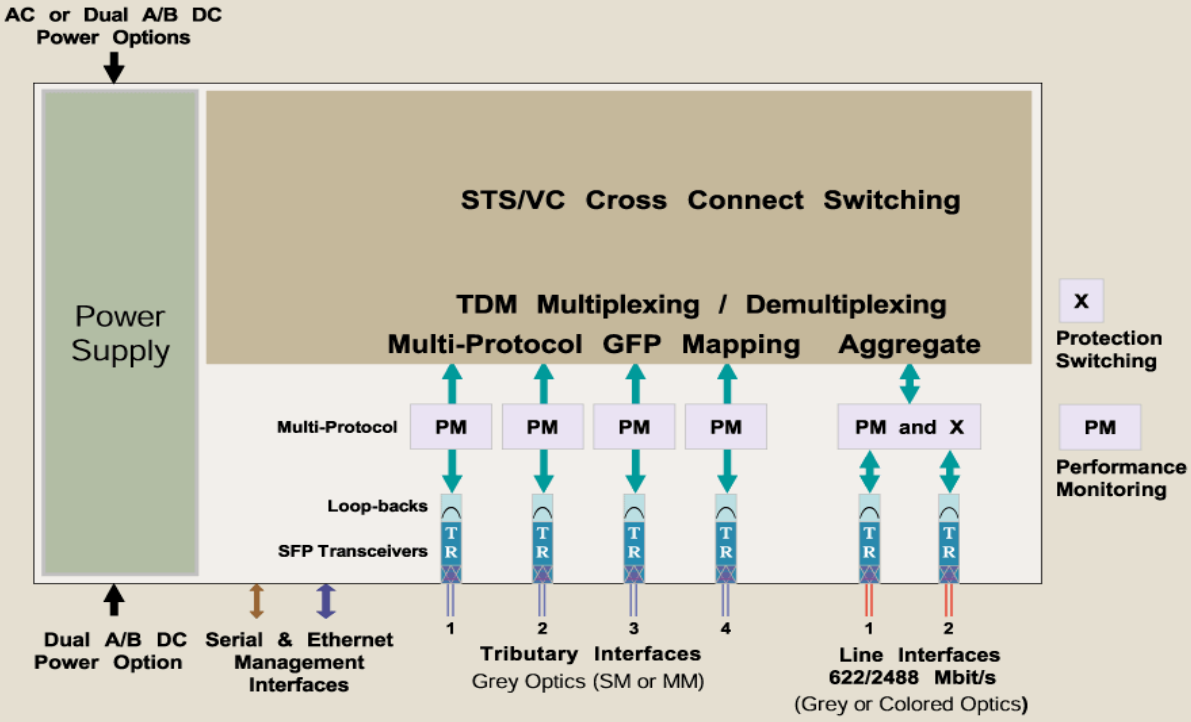
Features

- Four bidirectional channels on a fibre pair
- Supported topologies: point to point, 2330 to 8200, 2330 to SONET/SDH ADM or XCC, and 2330 trees
- Small footprint – 19” x 11” x 1.75” (1RU)
- 1+1 protection of aggregate interface (optional)
- Wide range of interfaces supported: OC-3/12/48, STM-1/4/16, 100BaseFX, 100BT, ESCON, FICON, Fibre Channel (1Gb/s and 2Gb/s), GbE
- Flexible 4 x ANY service mix – any service in any port.
- Reduce spares holdings—only require chassis and SFPs
- AC or DC power options
- Standards-based SONET (GR-253/GR-820), SDH (G.826/G.829/G.784) and data performance monitoring statistics allow carriers to support client SLAs
- Remote configurability and diagnostic loopbacks
- Low power consumption – less than 40W for a fully configured system
- Adding services, performing maintenance and upgrading software can all be done in service and non-disruptively

Applications

The RBNi GigaEdge 2330 GFP-based multiplexer enables carriers to provide and support metro and access network applications including:

- Aggregation of TDM, IP and Storage Area Networking (SAN) traffic over a common infrastructure
- Point to point interconnection of traffic between central offices and/or customer premises
- Solutions requiring interoperability with other GFP muxes or VC/STS cross-connects, ie. multiplexing at customer premises with backhaul to switches at the CO
- Disaster Recovery/Business Continuity—support of high-capacity SAN solutions for enterprise customers



2000 Series Mini-MSPP

The 2330 is the first in a series of GFP-based mini Multi Service Provisioning Platforms (MSPP) that offer the best available set of flexible options for configuring your Service Network solution. Future additions to the RBNi GigaEdge 2000-series will extend the capabilities of the 2330 to multiplex up to 16 customer services onto a single OC-48 or STM-16 aggregate traffic stream.

Dynamic Flexibility

The RBNi GigaEdge 2000-series MSPPs are designed for dynamic configuration flexibility—client interfaces are not hard-wired and can be reconfigured as customer traffic requirements change. Their “plug and play” design, small form factor, and low power consumption all contribute to lowered operational expenses. The 2000-series can be configured to support any mix of SAN, Ethernet, and SONET/SDH services by simply installing the correct SFPs – it is a single platform for all your Service Network multiplexing requirements.

GFP

Both frame-mapped (GFP-F) and transparent GFP (GFP-T) are supported. GFP-T enables low latency transmission of SAN protocols while GFP-F enables more bandwidth efficient multiplexing of Ethernet services, including oversubscription with flow control.

Concatenation

Contiguous concatenation enables GFP-mapped traffic to be carried over SONET and SDH networks. Virtual concatenation ensures compatibility with existing SONET/SDH equipment and enables flexible, bandwidth-efficient mapping of client traffic.

DCC Management

Standards-based (ITU-T G.7712) DCC management capabilities have been implemented to further assist in integration with existing SONET and SDH network infrastructure.

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SYSTEM

Customer services supported	OC-3, OC-12, OC-48, STM-1, STM-4, STM-16, ESCON, FICON, FCh, 2 Gig FCh, Gigabit Ethernet, 100BaseFX, 100BT
Total aggregate capacity	Choice of OC-12, OC-48, STM-4 or STM-16
Multiplexing capabilities	Up to 4xANY customer services VC-4/STS-3c granularity, (same hardware platform can be upgraded to VC-3/STS-1 in future) Contiguous and virtual concatenation
Network Topologies	Point-to-point, 2330 to 8200, 2330 to SONET/SDH ADM or XCC, and 2330 trees
Dynamic configuration flexibility	Multiplexer fully reconfigurable from remote location
Performance Options	optional 1+1 protection on aggregate
Performance Monitoring	In-traffic performance monitoring (ITU-T G.826/G.829/G.784 + Telcordia GR-253/GR-820 + 8B/10B)
Diagnostic ability	Built in diagnostic loopbacks
Upgradeability	In-service migration for all software upgrades and configuration changes

OPTICAL

Optical Interfaces	Hot-swappable SFPs supported on tributary and aggregate interfaces
Safety	Class 1 laser product

MANAGEMENT

Management Interfaces	RS-232, 2 x 10/100BT
Craft Interface	TL1, RBNi GigaCraft 1200
OSS Interfaces	TL1, SNMP alarm & event traps
Supervisory Channel	IP-only DCC

ENVIRONMENTAL

Operation Temperature Range	-5 °C to +55 °C without fans
Shelf Dimensions	19” x 11” x 1.75” (1RU)
Power Input Options	48 V DC, A and B feeds, front or rear connection 85-264 V AC, 50-60 Hz, rear connection
Power Consumption	40 W (typ.) per fully provisioned unit

Please contact RBN for further product information

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