

Compact, flexible xWDM Muxponder and Transponder for enhancing existing SONET/SDH transport networks at up to 2.488Gbit/s rates with new high-speed services such as GigE, SAN and Video.



KEY FEATURES

- Single platform supports a 4xANY xWDM Muxponder or up to 3xANY xWDM Transponders
- Muxponder stacking enables more low speed services per xWDM λ
- Cost-effective, pluggable SFP optics on client and aggregate ports with grey and xWDM options

 which greatly simplifies sparing
- Scales easily from point-to-point to large ring networks using 6000 series filters for passive drops and optional GigaEdge 8200s or 2320 Transponders for regeneration
- All management and diagnostics remotely accessible via DCC
- Low power (50W) and wide temperature range (-5°C to +55°C)
- No fans or air filters hence no scheduled maintenance required
- Deployable in CO, Air-conditioned OSP Cabinet, Underground Vault, Building Basement or Riser
- AC or DC power supply options

© 2006, RBN Inc. All rights reserved RBNi, RBNi GigaEdge 2320, RBNi GigaEdge 6000, RBNi GigaEdge 8200, the RBN logo and RBN tagline are trademarks of RBN Inc.

The RBNi GigaEdge 2320 is an integrated xWDM Muxponder and Transponder platform that multiplexes any mix of four SONET or SDH, Gigabit Ethernet, SAN and Video services onto a protected 2.488 Gbit/s aggregate (4xANY Muxponder) or hair-pins adjacent ports to provide 100 Mbit/s – 2.488 Gbit/s Transponders to support minimum latency (eg, for SAN applications) or 100% protocol transparency (eg, for legacy transport such as SONET/SDH where it is preferred that the section overheads not be terminated). A larger number of lower speed ports per Muxponder are possible by stacking other GigaEdge 2320 units via 622Mbit/s or 2.488Gbit/s tributary connections using low cost grey (1310nm) SFP optics.

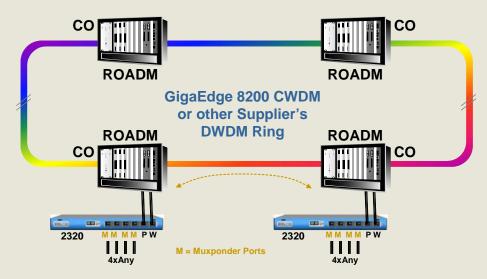
The 2320 xWDM Muxponder + Transponder can terminate up to 5 Gbit/s of SONET/SDH plus high speed data capacity in one rack unit (eg, OC48 + GigE + Fiber Channel). As a 4xAny Muxponder, it is ideal as a port-expander for existing xWDM networks (such as a GigaEdge 8200 CWDM network) to improve their wavelength efficiency and extend their life. Coloured xWDM SFP optics and external 6000-series xWDM optical add/drop or terminal multiplexers are also available to implement new point-point, bus and ring xWDM networks.

The RBNi GigaEdge 2320 can be used in a wide range of configurations and applications:

- Standalone point to point as a 4xAny multi-protocol service aggregator and Optical Network Termination Unit (ONTU) - providing carrier to customer demarcation at the edge of the network with ITU/Telcordia standard performance monitoring for SLAs;
- Transponder plus 2xAny Muxponder where a carrier's existing OC-48/STM-16 network requires a new GigE, SAN or Video service overlay between two adjacent COs with no change in existing SONET/SDH management and there is no spare fiber remaining.

The use of SFP optics and a flexible, remotely configurable platform makes the 2320 the most versatile multi-service xWDM Muxponder + Transponder solution on the market. A carrier or enterprise customer no longer has to worry about purchasing the wrong mix of client interface cards or having to wait weeks to turn up a new service. Instead, they can install an appropriate SFP only when a new service is required. Using programmable, multi-rate SFPs enables the 2320 solution to be 100% remotely configurable. This minimizes spares holdings and costs, service turn-up delays and expensive truck rolls to remote sites.





RBNi GigaEdge 2320™ Specifications

xWDM Port Expander Application

SYSTEM

Muxponder interfaces: OC-3, OC-12, OC-48, STM-1,

STM-4, STM-16, FC, 2G-FC, FICON, ESCON, GigE, DVB-ASI

Muxponder capabilities: Up to 4xANY client services in 1 rack unit - expandable to 16

services in 2.488 Gbit/s via 2320 stacking & VC-3/STS-1 grooming

Muxponder aggregate: OC-12, OC-48, STM-4 or STM-16

Transponder interfaces: OC-3, OC-12, OC-48, STM-1,

STM-4, STM-16, FE, FC, 2G-FC, FICON, ESCON, GigE, DVB-ASI

Transponder capabilities: Up to 3xANY client services at

their native transmission rate.

Network Topologies: Point-to-point: 2320 to 2320 xWDM Network: 2320 to xWDM Ring, Linear and Point-Point

Remote configuration:

Multiplexer fully reconfigurable from a remote location via
Ethernet and in-band IP/DCC

Protection Options: Optional 1+1 path protection on

Muxponder aggregate port
Performance Monitoring: ITU-T G.826/G.829/G.784 +

Telcordia GR253/GR820+8B/10B

Diagnostic ability: Built-in diagnostic loop-backs

Upgradeability: Future-proof, fully programmable firmware platform for multi-vendor support with in-caption software

support with in-service software upgrades & configuration changes

OPTICAL

Optical Interfaces: Hot-swappable SFPs supported

on tributary and aggregate

interfaces

Wavelengths: 1310nm SM, 850nm MM

1550nm SM, CWDM/DWDM SM

Safety: Class 1 laser product

MANAGEMENT

Management Interfaces: RS-232, 2 x 10/100BaseT

Craft Interface: TL1, RBNi GigaCraft 1200

OSS Interfaces: TL1, SNMP alarm & event traps

Supervisory Channel: IP over DCC

ENVIRONMENTAL AND POWER

Operational Temperature Range: -5°C to +55°C (no fans)

Shelf Dimensions: 19" x 11" x 1.75" (1RU)

Power Input Options: 48 VDC, A and B feeds,

front or rear connection, 85-264 VAC, 50-60 Hz, rear connection only

real connection only

Power Consumption: 50W (typ.) per fully provisioned unit

743-000-016/2

