RBNi GigaEdge 8200™
Tributary Interface Modules

KEY FEATURES

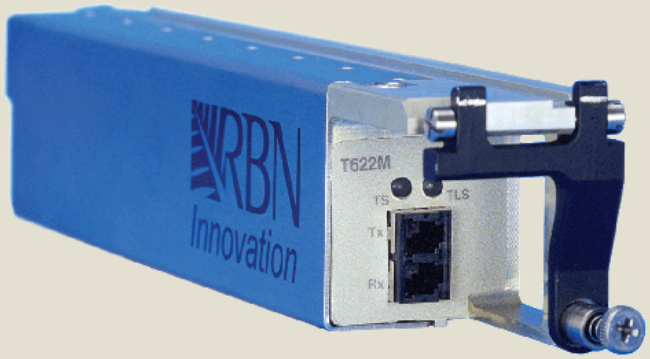
- Hot swappable modules with any module in any slot flexibility
- Plug and Play WDM™—all TIMs are wavelength independent
- Multi-rate, multi-protocol TIMs minimizes spares holdings
- As few as three variants can cover the entire range from 51 to 2488 Mbit/s
- Support for OC-1 to OC-48, STM-1 to STM-16, GbE, 100BASE-FX, Fibre Channel, 2G Fibre Channel, ESCON, FICON, DVB ASI video
- Advanced thermal design for -40 °C to +65 °C operation
- Less than 5 W power consumption per TIM
- 3R transmission — Re-amplify, Reshape, Retime
- Flexible path protection options
- No external system fiber cables required
- Loss of signal alarms

The RBNi GigaEdge 8200 Tributary Interface Modules (TIMs) provide client equipment and tributary links with reconfigurable access to a protected 10 Gbit/s WDM backbone network. Only three TIM variants (eg, T622M, T1000 & T2400), cover a wide range of popular interface protocols and data rates ranging from 51 Mbit/s to 2.488 Gbit/s.

TIMs of any type, can be installed in any of four TIM-slots within an RBNi GigaEdge 8200 enclosure. All TIMs are wavelength independent and there is no external fiber cabling required other than the tributary interface cables. There is one tributary interface port per TIM, which when combined with the fault-tolerant RBNi GigaEdge 8200 architecture, guarantees that there is no single point of failure that can affect more than one service.

Each TIM is analogous to a Small Form-factor pluggable transceiver—but with: locally or remotely provisionable multi-rate interfaces; 3R regeneration; multi-rate signal monitoring and loss of signal detection; automatic 1+1 path protection switching options with less than 50 ms switch-over time; and extended ambient temperature range (-40 °C to +65 °C). Where client-layer service protection is required, two TIMs can be installed and then locally or remotely configured to connect to the east and west Network Interface Modules (NIMs).

The switching and transmission architecture of the RBNi GigaEdge 8200 supports full logical mesh connectivity between TIMs attached to the same ring. Remote service provisioning is used to connect any TIM to any channel. Maximum utilization of WDM channel resources is achieved through channel re-use, multicast and broadcast transport options. These features support both protected and unprotected video distribution services. Input to a TIM at any point in the network can be output from any number of TIMs attached to the same RBNi GigaEdge 8200 network.



RBNi GigaEdge 8200 Tributary Interface Modules

Density	One service per module
Connector	LC duplex
Power	< 5 W (above 0 °C)
Alarms	Loss of signal Loss of synchronisation
Loopbacks	TIM tributary Network channel
Temperature	-40 °C to +65 °C
Safety	Class 1 laser product
LEDs	Loss of Signal (TLS), Module Status (TS)

S1000 — 1 Gbit/s Short Reach

Protocols Supported	Gigabit Ethernet (1000BASE-SX) Fibre Channel (100-M5-SN-I) FICON
Fiber	Multimode, 850 nm
Distance	2 m to 550 m

S622M — 51 - 622 Mbit/s Short Reach

Protocols Supported	OC-1 OC-3/STM-1, OC-3c/STM-1c OC-12/STM-4, OC-12c/STM-4c ESCON DVB-ASI Fast Ethernet (100BASE-FX)
Fiber	Multimode, 1310 nm
Distance	up to 2 km

T2400 — 2.488 Gbit/s Intermediate Reach

Protocols Supported	OC-48/STM-16 OC-48c/STM-16c 2 Gigabit Fibre Channel (200-SM-LC-L)
Fiber	Singlemode, 1310 nm
Distance	up to 21 km

T1000 — 1 Gbit/s Intermediate Reach

Protocols Supported	Gigabit Ethernet (1000BASE-LX) Fibre Channel (100-SM-LL-L) FICON
Fiber	Singlemode, 1310 nm
Distance	2 m to 10 km

T622M — 51 - 622 Mbit/s Intermediate Reach

Protocols Supported	OC-1 OC-3/STM-1, OC-3c/STM-1c OC-12/STM-4, OC-12c/STM-4c ESCON DVB-ASI Fast Ethernet (100BASE-FX)
Fiber	Singlemode 1310 nm
Distance	up to 21 km

Please contact RBN for further product information

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