



Overview

Riverstone Networks' next-generation 2-port 1000 Base T modules for the RS 8000 and 8600 switch router chassis provide network connectivity through RJ-45 connectors – Gigabit speeds delivered over copper for rapid and low-cost rollout of Service Provider networks. This module is also ideal for Gigabit Ethernet connectivity to servers or interconnection between switches and routers and delivers Gigabit-rate traffic over a Cat-5 cable infrastructure leveraging existing investments. These modules deliver full-function Layer 2/3 and 4 switching and routing as well as advanced functionality including Network Address Translation (NAT), Server Load Balancing (SLB) and Access Control Lists (ACLs).

The unique capabilities of the Gigabit Ethernet module's architecture include Hardware Rate Limiting (HRL), Local Hardware Route Table (LHRT) and Jumbo Frame support. These features are well suited to address the aggressive needs of Service Providers. HRL includes Port Rate Limiting and Aggregate Rate Limiting which are ideal for Application, Content and Multi-Tenant-Unit Service Providers. These environments require the ability to set up and manage a large number of new connections per second. Local Hardware Route Table (LHRT) enables routing tables to be stored locally on the modules which enhances the connection set up time compared to cache-based routers. Jumbo Frames extend the Ethernet payload size which in turn increases throughput for content providers. The Riverstone module performs fragmentation in hardware allowing seamless integration between Jumbo Frame and non-Jumbo Frame supported equipment.

2 Port Gigabit Ethernet TX Module: RS 8000 / 8600 Chassis

Features

- Standards-based Gigabit Ethernet over Copper
- Hardware Rate Limiting (HRL) including Port Rate Limiting and Aggregate Rate Limiting
- Jumbo Frame and hardware fragmentation support for up to 64,000 byte packets
- Local Hardware Route Table (LHRT) supporting more than 200,000 routes on each module
- Advanced wire-speed features including Network Address Translation (NAT) and Server Load Balancing (SLB) on every port
- Weighted fair queuing (WFQ) and weighted random early discard (WRED) support

Key Applications

- Traffic aggregation over Gigabit Ethernet links for POP sites and data centers
- Enable rapid deployment of transparent LAN Services over new or installed fiber
- Provision billable IP services per user or per application
- Integrate SLA billing and monitoring packages with real-time port-level flow accounting and full RMON statistics

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2 Port Gigabit Ethernet TX Module (RS 8000 / 8600 Chassis): Technical Specifications

Technical Specifications

Module Specifications

Switch/Routing Engine:	RS ASIC Route Engine
Buffer Memory:	8 MB per port
Layer 2 Address Table Size:	256,000 entries
Layer 3/4 Table Memory:	16 MB
Layer 3/4 Table Size:	256,000 entries
Route Table Memory Size:	Local route table on each module supports more than 200,000 routes
QoS Support:	WFQ, WRED and per port/subnet/flow rate limiting
MTBF (Predicted):	>200,000 hr.
In-band Mgmt:	Remote SNMP and Telnet

Physical Specifications

Dimensions:	11.00" x7.75"x1.55" (27.94 cm x 19.68 cm x 3.94 cm)
Weight:	3.0 lbs (1.4 kg)

Environmental Specifications

Operating Temp:	+5° to +40°C (41° to 104°F)
Non-Operating Temp:	-30° to +73°C (-22° to 164°F)
Operating Humidity:	15% to 90% (non-condensing)
Power Consumption:	100 to 125 VAC Max or 200 to 250 VAC Max, 50 to 60 Hz

Agency Standards and Specifications

Safety:	Meets the requirements of UL1950, CSA C22.2 No. 950, EN60950, IEC950 and 72/73/EEC.
Electromagnetic Compatibility:	Compliant with the requirements of FCC Part 15, CSA C108.8, EN55022, VCCI V-3/93.01, EN50082-1 and 89/336/EEC

Interfaces

2 Port 1000Base-T with RJ-45 connectors	
IEEE 802.3ab	
1000 Base-T Characteristics:	
Segment Length:	100 m (328 ft.)
Minimum Cable Requirement:	Category 5 cabling system as per ANSI/TIA/EIA-568-A. Return loss and Equal Level Far End Cross talk (ELFEXT) as per ANSI/TIA/EIA TSB-95

Ordering Information

Part No.	Product Description
G8M-GTXB2-02	2 Port Gigabit Ethernet TX Switch Router Module with Hardware Rate Limiting and Jumbo Frame support

For complete ordering information, including specific modules, contact your Riverstone representative at **(408) 878-6500**. You may also visit our Website at www.riverstonenet.com.



Module is specifically for the RS 8000/8600 chassis



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