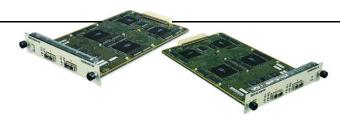
2 Port Gigabit Ethernet TX Module: RS 8000 / 8600 Chassis



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





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

Interfaces

IFFF 802.3ab

Segment Length:

Minimum Cable

Requirement:

1000 Base-T Characteristics:

2 Port 1000Base-T with RJ-45 connectors

100 m (328 ft.)

Category 5 cabling system as per ANSI/TIA/EIA-568-A. Return loss and

Equal Level Far End Cross talk (ELFEXT)

Technical Specifications

Module Specifications

Switch/Routing

RS ASIC Route Engine

256,000 entries

Engine:

Buffer Memory: 8 MB per port

Layer 2 Address Table Size:

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)

3.0 lbs (1.4 kg) Weight:

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

Compliant with the requirements of Compatibility: FCC Part 15, CSA C108.8, EN55022,

VCCI V-3/93.01, EN50082-1 and

89/336/EEC

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.

as per ANSI/TIA/EIA TSB-95



Module is specifically for the RS 8000/8600 chassis



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