

# Channelized DS3 Module: RS 38000

## OVERVIEW

Riverstone Networks' DS1/DS3 WAN solution leverages telco T1 leased line service for the remote and DS3 co-location service for the hub. It is an ideal match for Service Providers wanting to quickly deploy infrastructure for MTU/MDU and other applications.

Riverstone Networks' four-port channelized DS3 line card extends the application-aware routing benefits of the RS 38000 to the WAN. The line card supports PPP, MLPPP, and Frame Relay. Detailed accounting information can be gathered using per-PVC wire-speed RMON, enabling confirmation of committed information rates (CIRs).

By implementing all features in hardware, the Riverstone architecture enhances network performance compared with software-based routers. Additionally, congestion control is achieved across the WAN through flow-rate limiting together with Weighted Random Early Discard (WRED) and Weighted Fair Queuing (WFQ). Prioritization policies can be extended from WAN to LAN environments enabling resource allocation to specific groups of users or application flows.

This four-port channelized DS3 line card for the RS38000 platform supports internal CSU/DSU. Each of the DS3 ports has a test port, allowing the user to test any DS1 within the DS3. The channelization feature allows the user to access all 28 DS1 individually. The MLPPP feature supports nxT1 bundling.

## FEATURES

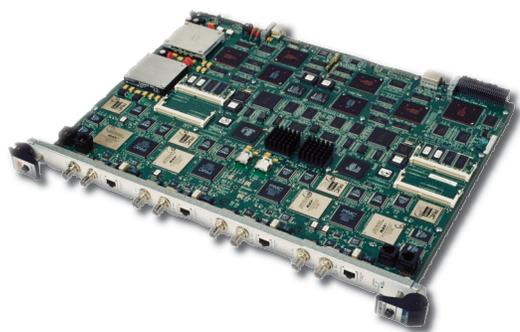
- Four-port channelized DS3 line card (112 DS1) with BNC connectors
- Each DS3 port has an associated test port with RJ 45 connector for DS1 line testing
- Channelized DS3 supporting 28 DS1, DS1 rate may be any fractional rate
- M13 or C-bit parity framing
- Support ANSI T1.102, 107, and 404 standards
- DSX-3 statistic available for diagnostic
- Loopback and diagnostic
- Integrated CSU/DSU
- Support FR, PPP, MLPPP
- MLPPP for nxT1 bundling feature, MLPPP between ports one and two, and between ports three and four
- 802.1Q VLAN
- Weighted Fair Queuing
- Weighted Random Early Discard
- QoS
- Hot swap support



## KEY APPLICATIONS

- Provide highly scalable DS1 aggregation at the hub; ideal for the MTU/MDU market segment
- nxT1 bundling feature increases access speed to the backbone
- Rapid deployment of WAN infrastructure by leveraging existing telco-leased line service
- Flexible connectivity to minimize subscriber churn
- Extends the benefits of wire-speed Layer 4 application-aware switch routing to the WAN
- Maximize revenue by provisioning WAN bandwidth into fixed increments for billing based on usage
- Integrate SLA billing and monitoring packages with real-time port-level flow accounting and full RMON statistics

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## Environmental Specifications

Operating Temp:	+0° to +40°C (32° to 104°F)
Non-operating Temp:	-40° to +70°C (-40° to 158°F)
Operating Relative Humidity:	10% to 90% (non-condensing)
Non-operating Relative Humidity:	5% to 95% maximum (non-condensing)
Altitude, Operating and Non-operating:	10,000 ft (3,000 m) maximum
Shock and Vibration:	GR63

## Module Specifications

Interface Types:	4-port DS3, compliant with ANSI T1.404, channelized support only
Connector type:	BNC connector
Framing:	M13, C-bit
Line code:	B3ZS
DS1 test port:	4 (one for each DS3)
Switch/Routing Engine:	RS ASIC Route Engine
MTBF (Predicted):	>200,000 hr.
In-band Mgmt:	Remote SNMP and Telnet

## Physical Specifications

Dimensions:	14" x 19" (35.56 cm x 48.26 cm)
Weight:	10.0 lbs. (4.7 kg)

## Agency Standards and Specifications

Safety:	Certified 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, EN50082-1, and 89/336/EEC

## Ordering Information

Part No.	Product Description
R38-CT3DB-04	4-port channelized DS3 line card

All products above are available with a light encryption option, to comply with US export laws. For availability and complete ordering information, including specific modules, contact your Riverstone Representative at +1 408.878.6500. You may also visit our website at [www.riverstonenet.com](http://www.riverstonenet.com)



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