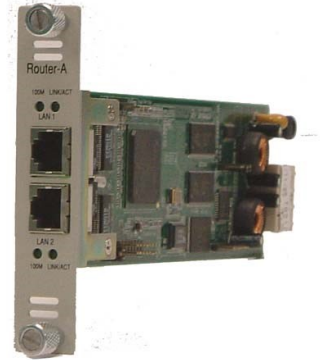# ROUTER A

Features

- 10/100 Base T interfaces
- Auto MDI/MDI-X crossover
- Routing protocol: RIP-I, RIP-II, OSPF (Open Shortest Path First) and static
- Remote bridge
- Software field upgradeable
- Supporting Protocols: PPP, MLPPP, HDLC, Frame Relay, and Cisco compatible HDLC
- VLAN-ID mapping
- Up to 64 WAN ports with aggregate data rate of 4Mb/s
- Remote bridge support (padding/un-padding Ethernet FCS)
- Support of QoS (Quality of Service)

DESCRIPTION

CXR's Router-A card is designed for the CXR-QX3440 series. It occupies one mini slot of the CXR-QX3440. When used within the CXR-QX3440, this card combines the function of a router and directs Ethernet traffic to/from multiple WAN channels. With this card, access from LAN to WAN is accomplished within one card, resulting in savings in cost and in space.

ORDERING INFORMATION

Model (RoHS compliant)	Description	Note
QX3440-RTA	64 WAN ports router/bridge card	For QX3440 and QX3440-S only.
Accessories		
User's Manual (All User's Manuals are RoHS compliant)		
CXR-QX3440-RTA-UM	Optional hard-copy (paper) User's Manual. A CD version of the manual is already included as standard equipment.	

PRODUCT SPECIFICATIONS

Physical Interface

Two 10/100BaseT interfaces

Up to 64 WAN ports

One mini slot of AM3440-A

Each interface can be configured as a bridge port or router port

WAN Interface

Up to 64 WAN ports

Each WAN port has data rate n x 64K bps, $1 \leq n \leq 32$ ($\leq$ 4Mbps for total of all 64 WAN ports)

Layer-two protocol: HDLC, PPP (IPCP/BCP/MLPPP), Frame Relay, Cisco compatible HDLC

Up to 64 Frame Relay PVCs

LAN Interface

Two 10/100BaseT interfaces

Auto MDI/MDI-X crossover

Speed auto-sensing

Half/full duplex auto-negotiation

Speed/duplex force mode

Router

Routing protocol: RIP-I, RIP-II, OSPF and static

NAT

NAT/NAPT

Static address table for NAT

Port forwarding table for NAPT (Virtual Service)

DHCP

DHCP server support for LAN users (RFC2131, RFC2132)

BOOTP compatible

DHCP relay

Access Control and Firewall

Policy based on

Inbound/outbound direction

Source/destination IP address

Protocol types (ICMP, TCP, UDP, ...)

Port number range

Up to 64 control lists
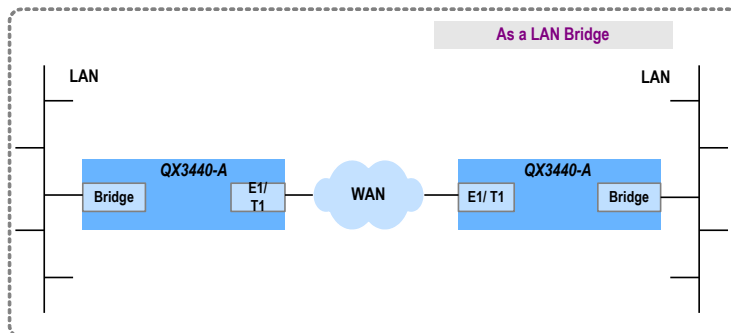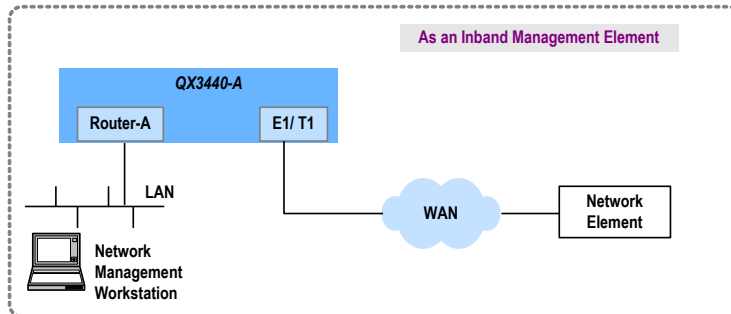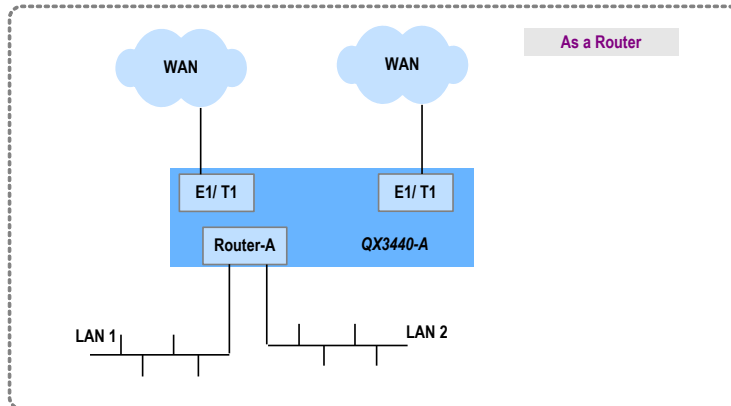
QoS based on rate limit

Remote Bridge

User configurable aging time

Up to 16K MAC table

Cisco ISL packet transparent

VLAN packet transparent

padding/un-padding Ethernet FCS

Rapid Spanning Tree Protocol support (IEEE 802.1w)

VLAN-ID mapping

MAC address based Policy

DHCP relay and server

Routing between bridge group and router interfaces

Diagnostics

Ping

Traceroute

APPLICATION ILLUSTRATIONS

As a Router

WAN WAN

E1/ T1 E1/ T1

Router-A *QX3440-A*

LAN 1 LAN 2

As an Inband Management Element

QX3440-A

Router-A E1/ T1

LAN

WAN Network Element

Network Management Workstation

As a LAN Bridge

LAN LAN

QX3440-A *QX3440-A*

Bridge E1/ T1 WAN E1/ T1 Bridge

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