



OXR-3200

Product Data Sheet

OVERVIEW

Luxcore Networks Access Switch Router **OXR-3200** has integrated TDM telephony capability and enables service providers to deliver traditional and advanced services over fiber. **OXR 3200** allows broadband service providers to offer data, streaming video, and both packet and traditional TDM telephony services over their existing networks. **OXR 3200** provides full-featured routing and switching, bandwidth control and management, multi-layer prioritization, Quality of Service and traffic classification. It also supports all forms of clock timing propagation for traditional TDM services in the Ethernet domain. A full suite of data, telephony and packet applications are available in this compact and scalable platform.

APPLICATIONS

- ✚ Ultra High Speed Internet
- ✚ Virtual LAN
- ✚ Transparent LAN Services
- ✚ Transparent VLAN Services
- ✚ Video Streaming
- ✚ VPN
- ✚ VoIP
- ✚ TDM Telephony Services

FEATURES

- ✚ Cost-effective, scalable, high capacity
- ✚ Remote bandwidth provisioning and management
- ✚ Supports ring, point-to-point and daisy chain
- ✚ Source and destination based switching
- ✚ T1/E1 telephony interfaces
- ✚ Stratum 4E network synchronization
- ✚ Simplified installation and provisioning
- ✚ Support for value-added services
- ✚ Route and path redundancy, fast protection switching
- ✚ Gigabit and 10/100 Mbps Ethernet
- ✚ 100BASE-FX

SPECIFICATIONS

Networking Functions

- ✚ Supports 16k MAC addresses
- ✚ Supports 4094 VLANs
- ✚ VLAN stacking with user priority mapping
- ✚ On-demand bandwidth management
- ✚ Local provisioning
- ✚ Port and VLAN based rate control

Telephony Clock Source

- External:
- ✚ DS-1 user port, BITS clock input, GbE network interface
- Internal:
- ✚ On-board temperature compensated oscillator with
 - ✚ Stratum 4E Synchronizer
 - ✚ Supports Sync Status Message (SSM)



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- ✚ GARP VLAN Registration Protocol (GVRP)
- ✚ Broadcast storm control
- ✚ BPDU tunneling
- ✚ Port Mirroring
- ✚ MAC Filtering
- ✚ Link aggregation (5 groups)
- ✚ Neighbor discovery protocol (NDP)
- ✚ Ring topology discovery protocol (RTDP)
- ✚ 802.1p Quality of Services (QoS)
- ✚ DS-1 transport with 1+1 flow protection
- ✚ DS-1 network surveillance
- ✚ Programmable CES VLAN range
- ✚ Rapid Spanning Tree Protocol (RSTP)

Protection

- ✚ Hot swap:
 - SFP transceivers live insertion
 - Interface card live insertion
 - Redundant power supply
 - N-1 fan redundancy with fan status monitoring
- ✚ Over-temperature power cut-off
- ✚ Temperature zone status and alarm
- ✚ Route protection
- ✚ Sub-50 ms DS-1 protection switching
- ✚ Sub-1 sec data protection switching
- ✚ Timing clock switching

Management Functions

- ✚ CLI for local (COM port) and remote (Telnet) management
- ✚ Front and rear local LAN ports
- ✚ MIB II compliant with enterprise extensions
- ✚ Integral SNMP agent, Telnet, FTP
- ✚ Fully configurable via SNMP & CLI
- ✚ Local & remote tests / diagnostics
- ✚ Module power on self test (POST)
- ✚ Performance data collection
- ✚ Local and remote event logging, alarms/traps
- ✚ Software upgrades via in-band FTP
- ✚ Management plane RIP with ARP and PING
- ✚ ICMP Router Discover Protocol (IRDP)
- ✚ Alarm Input and Alarm Relay Output
- ✚ Database backup and restore
- ✚ Optional faster system reboot
- ✚ Four levels of user login types
- ✚ Configurable management VLAN

Power Requirements

- ✚ Hot swap, redundant power supply
- ✚ AC voltage: 100~120/200~240 VAC, 50-60Hz
- ✚ DC voltage: -48 (-36 ~ -72) VDC
- ✚ AC current rating: 2.86A @ 100~120V, 1.43A @ 200~240V
- ✚ DC current rating: 2.5A @ 48V

Environmental Specifications

- ✚ Relative humidity: 10% - 90%, non-condensing
- ✚ Operating temperature: 0oC to 50oC (32oF to 122oF)
- ✚ Non-operating temperature: -40oC to 85oC (-40oF to 185o)

Physical

- Dimensions:
- ✚ 3.5"(8.89 cm) H x 17"(43.18 cm) W x 12"(30.48 cm) D
- Weight: 10.2 pounds (4.63 kilograms)

Processing

- ✚ Processor: PowerPC 860P 50MHz
- ✚ Backplane: 12.8 Gbps
- ✚ Processing: 9.5 Mpps



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Interfaces

- ✚ 1000 BASE-SX, LX, LH20, LH40, LH80:
1 to 4 ports (SFP Transceivers)
- ✚ 10/100 BASE-TX: 8-port plug-in module with auto-MDIX and auto-negotiation
- ✚ 100 BASE-FX: 4- and 8-port SMF or MMF plug-in modules
- ✚ T1/E1: 4- and 8-port plug-in modules
- ✚ VLAN stacking: 4-port plug-in module

MIB Support

- | | |
|-----------------|----------------|
| ✚ RFC 1213 | MIB II |
| ✚ RFC 1493 | Bridge MIB |
| ✚ RFC 2011-2013 | SNMP V2 MIB |
| ✚ RFC 2233 | Interfaces MIB |
| ✚ RFC 2453 | RIPV2 MIB |
| ✚ RFC 2495 | DS-1 MIB |
| ✚ RFC 2674 | VLAN MIB |

Memory

- ✚ 32.5MB FLASH
- ✚ 64MB SDRAM for NMP

TDM Interfaces

- ✚ Electrical: DS-1, DSX-1, E1
- ✚ T1 Framing formats: D4/SF, D5/ESF, Unframed
- ✚ E1 Framing formats:
 - ✚ E1 Framed, E1 CRC multi-framed, E1 Unframed
- ✚ T1 Line coding formats: B8ZS, AMI
- ✚ E1 Line coding formats: HDB3, AMI
- ✚ Trans mit timing: Loop, Synchronous, Adaptive, SRTS

Standards Compliance

- ✚ FCC Part 68 and Part 15 Class A
- ✚ UL 60950, CSA 950
- ✚ EN55022 Class A, EN55024, EN60950
- ✚ IEEE 802.1Q VLAN tagging
- ✚ IEEE 802.1w Rapid spanning tree
- ✚ IEEE 802.3u 100BASE-T, FX
- ✚ IEEE 802.3x Flow control
- ✚ IEEE 802.3z GigaBit Ethernet
- ✚ ANSI T1.403 DS-1
- ✚ TR-TSY-000170 DSX-1
- ✚ CB 119, Issue 3 DS-1 management objects
- ✚ ANSI T1.231
- ✚ GR-1244-Core Issue-2 Stratum 4E
- ✚ IEEE 802.1D Bridging
- ✚ IEEE 802.1p Prioritizing
- ✚ IEEE 802.3 10BASE-T