

Orion 200

E1 and T1 Network Access Multiplexer



The Orion™ 200 E1 and T1 Network Access Multiplexer is ideally suited to provide network access in every corner of your world. Fully compliant with full and fractional E1 and T1 services, Orion 200 combines the features of a multiplexer, a multi-port DSU, and a performance monitor.

Orion 200 multiplexes high-speed serial applications at any multiple of 56 or 64 kbps using standard interfaces. Any combination of E1 or T1 network ports can be installed, supporting bypass or drop-and-insert applications—including E1-to-T1 and T1-to-E1 conversions.

Orion 200 includes extensive performance monitoring and diagnostics to help you realize the highest levels of service quality and uptime. Historical performance reports, automatic alarm dialout, multiple loopbacks, and BERT testing give you the performance data and trouble isolation capability you need to manage your network proactively.

You can manage Orion 200 from an SNMP Network Manager via 10Base-T Ethernet. The RS232 ports allow local and remote connections while a chain port lets you manage up to 30 Orion 200s over a single connection.

APPLICATIONS

- LAN/WAN interconnection
- T1-to-E1 and E1-to-T1 conversion, including voice
- Video streaming
- Non-intrusive monitoring of E1/T1 performance

BENEFITS

- Ability to integrate applications at multiples of 56/64 kbps each over two E1/T1 lines
- Integral E1 Performance Monitoring Units (PMUs) and/or T1 Channel Service Units (CSUs)
- Extensive performance monitoring and diagnostics, including multiple loopbacks and built-in pattern generator
- LAN Management with a direct Ethernet 10Base-T port
- Downloadable software for easy upgrades



Double your WAN network access performance with dual T1 connections. Here, a router with two V.35 ports is interfaced to a WAN via two links, providing 3 Mbps of bandwidth. International E1 connections provide over 4 Mbps of bandwidth. Comprehensive monitoring and management features enhance the Orion 200's extraordinary flexibility.

SPECIFICATIONS

FEATURES

Adaptability — Multiplexes two DTE ports; two networks ports can each be either E1 or T1

Co-location ready — -48 V dc or ac power

Easy management — Powerful performance monitoring, alarm reporting, and built-in diagnostics

INTERFACES

Network and Drop-and-Insert Ports — Full and fractional E1 and T1

Rate — 2.048 Mbps (E1) or 1.544 Mbps (T1) ±50 ppm

Framing — E1: per G.704, with or without CRC-4; T1: D4 or ESF per AT&T 62411

Line Coding — E1: HDB3; T1: AMI, AMI with bit 7 stuffing, or B8ZS

Impedance — E1: 120 ohms balanced / 75 ohms unbalanced with adapter; T1: 100 ohms balanced

Clocking — Network, internal, DTE port, external, or station clock

Channel Multiplexing — E1: 1 to 31 time slots; T1: 1 to 24 DS0s; complies with G.802 for T1/E1 conversion; user-defined mapping; any DTE or network timeslot to any network time slot

Line Interface — DA 15; BNC for 75 ohm

DTE Interface (2) — EIA530 configurable to V.35, X.21, RS422/449

Management Interface — RJ48 Ethernet; front- and rear-panel RS232 ports

MANAGEMENT

Front-Panel Interface — Menu-driven; 2-line x 40-character LCD; 8 membrane keys; 7 status LEDs

Terminal Interface — Menu-driven; VT100 or TV 925 ASCII terminal; to 9600 baud

NMS Interface — TABS format for connection to a network management system

SNMP Interface — 10Base-T Ethernet port; Ds1 MIB (RFC 1406)

Performance Monitoring — E1: per G.821; T1: per AT&T Pub 54016, ANSI T1.403

Alarm Reporting — Local and remote: CV, CRC, BPV, AIS, LOS, Loss of Sync, threshold exceeded

Loopbacks — Local- and far-end: line, payload, V.54

Test Patterns — Framed QRSS, PRBS, All ONES, 3-in-24, 24-bit programmable

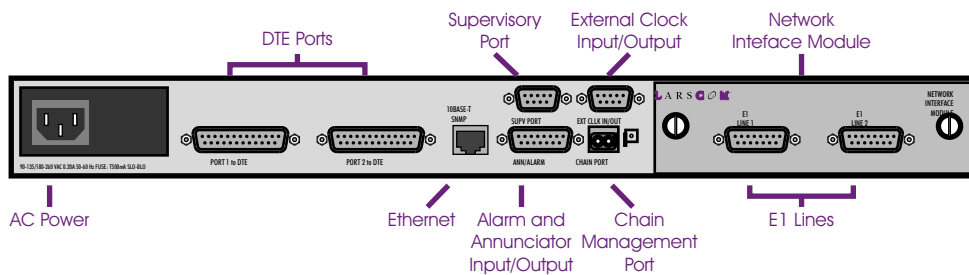
GENERAL

Power — -48 V dc nominal (-36 to -72 V dc); optional 240/2200/110 V ac, 48 to 63 Hz, 25 to 30 watts

Dimensions — 4.5 x 43 x 28.5 cm (1.75 x 17 x 11.2 inches); 19- or 23-inch rack

Environment — 0 to 50 °C (32 to 122 °F) ambient; up to 95% relative humidity, non-condensing

Regulatory Compliance — FCC Parts 15 Class B & 68; UL 1950; CE compliance with EU directives; call for other country approvals



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