A 3M Company

Quante Netzwerke GmbH

MuxMaster/ Wideband IAD

Loop-V4200-9

CSU/DSU, E1/T1 Converter, & DACS

The truly Integrated Access Device can support, control, and multiplex a wide variety of devices.

Features

- 9 hot plug-in capable slots
- Available plug-in types:
  - T1, E1 interface cards
  - V.35, EIA530, RS232, X.21 interface cards
  - QFXS, QFXO, PLAR, E&M interface cards
  - MDSL, G.shdsl interface cards
  - T1/ E1 ATM Frame Relay interface cards
  - Router interface card with Subnet management (SNMC)
  - G.703 (co-directional) interface card
  - OCU DP interface card
  - Terminal Server interface card
  - Fiber Optical Interface Card
- Usable as a CSU/DSU, E1 to T1 converter, multiple CSUs, or a DACS.
- Full TSI capability among all slots in main unit.
- Remote diagnostic capabilities.
- 2-line by 40-character LCD display for maintenance, performance monitoring, and administration.
- Management through Console port, Ethernet port, and SNMP agents.
- Inband Subnet Management facility for remote management through national networks.
- LED indicators for power, test, alarm, and each of 9 ports.
- Field changeable AC power supply, or dual feed dual DC power supply.
- Software field upgradeable through download.
- Optional GUI NMS with LoopView.

Description

The Loop-V4200-9 is a versatile 9-port device. Depending on the plug-in cards selected, this unit can be configured (a) as a CSU/DSU with drop and insert and voice capabilities, (b) as a 4 E1 to 5 T1 converter or fractions of them, (c) as a digital cross-connect system (DACS), (d) as sets of ICSU combined in one box, and (e) as a channel bank. As a CSU/DSU, data from the V.35 or X.21 port can occupy any fraction of an E1 or T1 port. As an E1 to T1 converter, A to μ law and coding and signaling conversions are correctly handled. For both E1 and T1 ports, continuous error checking, performance polling, and in-service diagnostics are provided. In any of the above combinations, full time slot interchange (TSI) among the ports are possible, making the Loop-V4200-9 a small DACS (digital access cross-connect system). The ports can further be used in pairs as ICSUs (intelligent CSU) at lower cost and smaller space than individual ICSUs. Lastly, the Loop-V4200 can be configured as a channel bank.

The Loop-V4200-9 supports local control and diagnostics by using a 2-line by 40-character LCD display and keypads on the front panel, or by using a VT-100 terminal connected to the console port. The Loop-V4200-9 also supports Ethernet, Telnet, and SNMP, so it can be controlled and diagnosed from remote locations. The Loop-V4200-9 also supports inband Management, where management data is carried the same way as user data, traversing national networks.

In addition to the LCD display, 12 multicolor LEDs provide status indication for power, test condition, alarm, and each of the 9 ports. Internal firmware is stored in flash memory so that future software upgrades can be downloaded.

Loop-V4200-9 MuxMaster/ Wideband IAD Product Specifications

Time Slot Interchange

Less than 400 µs delay

One active map, one user stored map

Voice Channel Conversion

A-law to µ-law G.711

CAS Signaling Transparent, (A=0 from E1 becomes A=0 to T1, etc.)

Electrical Power

Field changeable 30W 24Vdc or 30W 48Vdc power supply module

DC : 24Vdc, 3A Max. (12-36Vdc)
48Vdc, 1.6A Max. (36-72Vdc)

AC : 90 to 240 Vac, 50/60 Hz, 2A Max.

Physical

Dimensions	428.8 x 43.5 x 331.3 mm. (WxHxD)
Temperature Range	0 – 50 °C
Humidity	0 – 95% RH (non-condensing)
Mounting	Desk-top stackable, 19/23 inch rack mountable
Weight	7.7 lb., (3.5Kg) without plug-in cards

Performance Monitor

Performance Store	The last 24 hours performance in 15-minute intervals
Monitor Registers	Line, user
Performance Reports	Date & Time, Errored Second, Degraded Minutes, Unavailable Second, Bursty Errored Second, Severe Errored Second, Controlled Slip Second, and Loss of Frame Count
Alarm History	Date & Time, Alarm Type (i.e. Master Clock Loss, RAI, AIS, LOS, BPV, ES, CS)
Threshold	Bipolar Violation, Error Second, Unavailable Second, Controlled Slip Second

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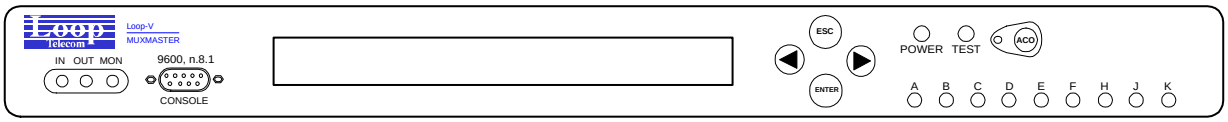
Network Management

Connector	DB9 at front panel
Electrical	RS232 interface
Protocol	Menu driven VT-100 terminal

Ethernet Port (optional)

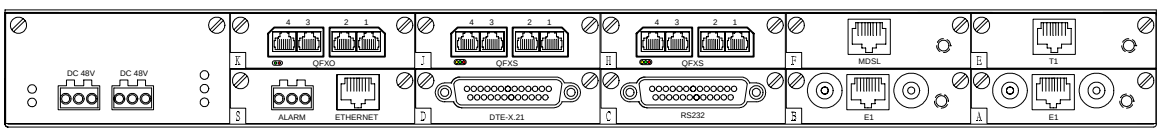
Connector	RJ45 in rear
Protocol	Telnet and Embedded SNMP

Front Panel



Keypads	5 keys, ACO (alarm cut-off), left and right arrows, ESC, and ENTER
LCD	2 lines by 40 characters LCD display
LED	12 - one for each of 9 plug-in slots, power, test, and alarm
Bantam Jacks	Network IN, OUT, and Monitor

Rear Panel

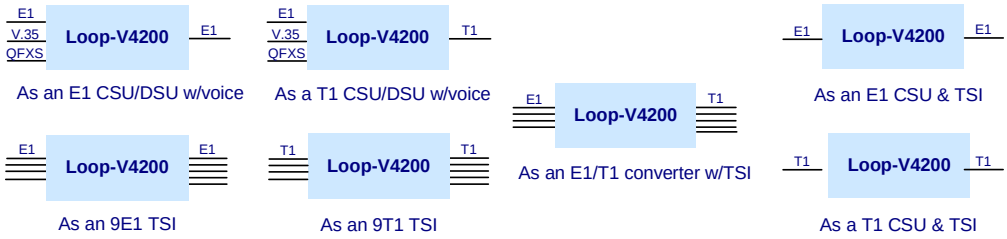


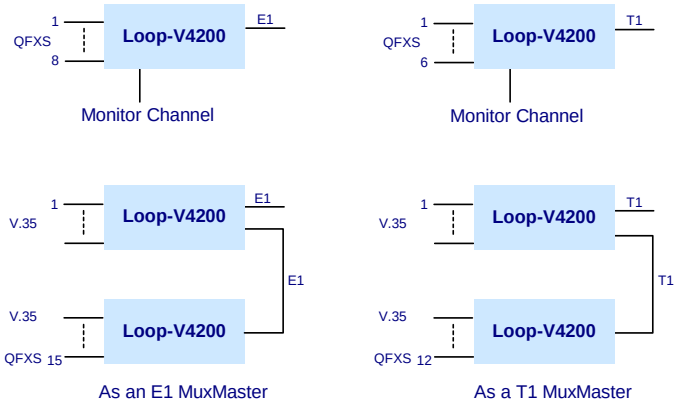
Power module slot, Ethernet slot, and 9 signal slots.

Compliance

CISPR 22 Class A, EN55022 Class A, EN50081, EN50082, FCC Part 15, FCC Part 68, CS-03 Issue 8, CE168X, NTR4, UL1950, CSA22.2 No.950, EN60950, NEBS Level 3: GR-1089-CORE, GR-63-CORE

Applications Illustrations





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