SERIAL SYNC/ASYNC UNIVERSAL DTE

QX3440-6RS-4SERIAL

TDM TRANSMISSION OF X21, RS232, RS422

Features

- Card for multiservice PDH QX3440/S and HX9500

- 6 ports X21, RS232, RS422 with software configuration per port

- 6 RS232 sync/asyn

- 4 X21 600bps to 2Mbps

- 4 RS422 sync/asyn 600bps to 64Kbps

- 5 Modes

- Mode 1 support 64K subrate V110/i463 transmission compatible with Alcatel 1511 and Mainstreet*

- Mode 2 : support n*64K (X.21/RS422/V.35/V.36/EIA530/RS449) and oversampling for RS232

- Single stream in Mode 1 or 2, one circuit per 64kbps TS

- Multi stream 64K subrate in Mux Mode 1 Mux, up to 6 circuit per 64Kbps TS

- RTS remote management

- Transport Serial over PDH and serial over PDH over SDH.

- Supported by SNCP-PDH and ULSR-PDH protection

The QX3440-6RS-4SERIAL card for QX3440 / QX3440-S series or HX9500R supports 6 software configurable interfaces as RS232, RS422 and X21/V35/V36/EIA530/RS449. The transmission of X21 is selectable ports from 600bps to 2Mbps and RS232 or RS422 from 600bps to 64Kbps. The 64Kbps sub-rate transmission is using the I.463/V.110 protocol and then it is fully compatible with the transmission of some particular PDH multiplexors.

The card could run in two modes corresponding of different demands. All the card is set-up by software in Mode 1 or Mode 2.

Mode 1: 2RJ48 for ASYNC RS232 + 2*DB44 with for 4 ports X.21/ RS232/ RS422 when data rate is < 64kbps, V.110 subrate protocol support

Mode 2: X.21/RS422/V.35/V.36/EIA530/RS449 SYNC Nx64k (N=1~32) for Port 1 to 4
Port 5 to 6 : Disabled

Mode 3: X.21/RS422/V.35/V.36/EIA530/RS449 SYNC, Nx64k (N=1~32) for Port 1 to 3. X.21 SYNC, N x64k (N=1~20) for Port 4. N*64kbps (N=1~6) for RS232 oversampling data for Port 5 to 6.

Mode 4 : Clock Pass through
Port 1 to 4 : X.21/RS422/V.35/V.36/EIA530/RS449 SYNC 38.4K and subrate
Port 5 to 6 : Disabled

Mode 5 : N*64K with Local and Remote Loopback X.21/RS422/V.35/V.36/EIA530/RS449 SYNC Nx64k (N=1~32) for Port 1 to 4
Port 5 to 6 : Disabled
Supports MUX Mode and Independent Mode for MODE1

The card owns two RJ45F connectors for RS232 async and two DB44F connector for RS232, RS422 and X21 interfaces.
CXR supply as option DB44M connector to 2 DB15F connectors, DB44M to 2 DB25F and RJ45M to DB9F or DB25F cables.
We supply also in option 19" 1.5U panel with 16 DB25F or 16 DB15F or 8 DB25F with 8 DB25F or other on demand.

The **QX3440-6RS-4SERIAL** card is usable in QX3440, QX3440S and HX9500R. All protection modes of E1 WAN interfaces 1+1, SNCP-PDH, ULSR-PDH and SNCP-SDH of the HX9500R are supporting the stream from QX3440-6RS-4SERIAL.
When the card is working in Mode 2, the stream are compatible with

QX3440-6RS-4SERIAL

SPECIFICATIONS

General

This card supports serial asynchronous and synchronous streams from 64K to 2Mbps and rates lower then 64K with 64Kbps sub-rating by using the i463/V110 Protocol
This is providing the compatibility of WAN stream with many multiplexors from other vendor (like Alcatel 1511*, Mainstream*,....)
The card supports 6 RS232, 4 RS422 or 4 X21 connections described thereafter.
The card support alternatively two modes of WAN transmission.

Mode 1

This mode carry 64K or lower rate to 64Kbps streams.
64Kbps sub-rate are transported within i463/V110 Protocol on the WAN over a 64Kbps TS.
Support single-stream per 64Kbps in Independent mode
Support up to 4 or 6 multi-streams per 64Kbps in Mux mode

DTE Interface (RS232) asynchronous
2 Data Ports (port5, port6): RJ45-ASYNC
Data Rate: Asynchronous Mux mode 0.6K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K
                  Independent mode 0.6K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K, 38.4K

DTE Interface (RS422/RS232) asynchronous/synchronous
4 Data Ports: DB44F-1 (port1,port2), DB44F-2 (port3,port4)
Asynchronous data rate: Mux mode 0.6K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K
                  Independent mode 0.6K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K, 38.4K
Synchronous data rate: Mux mode 0.6K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K,
                  Independent mode 0.6K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K, 38.4K, 48K, 64K

DTE Interface (X.21/V11) 600bps to 64kbps
4 Data Ports: DB44F-1 (port1,port2), DB44F-2 (port3,port4)
Synchronous: Mux mode 0.6K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K,
                  Independent mode 0.6K, 1.2K, 2.4K, 4.8K, 9.6K, 19.2K, 38.4K, 48K, 64K
MUX mode support maximum 4 sub-rate ports / 64Kbps

In Mode 1 the card support the mix of interfaces.

Mode 2: Port 1 to 4:
X.21/RS422/V.35/V.36/EIA530/RS449
SYNC N*64k (N=1~32)
Port 5 to 6: Disabled

Mode 3: Port 1 to 3:
X.21/RS422/V.35/V.36/EIA530/RS449 SYNC N*64k, (N=1~32).
Port 4: X.21/RS422 SYNC, N*64k, (N=1~20).
Port 5 to 6: RS232 N*64k (N=1~6) oversampling for ASYNC data.

All interfaces in Mode 1, 2, 3 supports:
Electrical :   DCE
Alarm :   Remote Alarm, RTS Loss
Loopback :   To-DTE, To-DS1 (To Line)

Cables and Patch panels:
In option CA-DB44M-xDB15F/xDB25F cables to support X21, RS232 and RS422
In option CA-RJ45-DB25F cable to support RS232
In option PAN-1U-16DBxxM/DBxxF one 19" 1U panel to support up to 16 DBxx connectors

MODEL AND ACCESSORIES

QX3440-6RS-4SERIAL	QX3440, QX3440-S, HX9500R card with 6 interfaces: RS232: 6 asynch (up to 38,4kbps) and 4 are usable in sync (up to 64K), 4 RS422 sync/async and 4 X21/V35/V36/EIA530/RS449 sync from 600bps to 2Mbps. V110/i463 over 1TS. Mux over 1 TS. 2 DB44F and 2 RJ45F connectors. Cable in option. Use 1 slot
CA-DB44M-2DB15F-1	Cable for QX3440-6RS-4SERIAL, for 2 X21 interfaces: DB44M to 2 DB15F, 1m
CA-DB44M-2DB25F-1	Cable for QX3440-6RS-4SERIAL, for 2 RS232 & RS422 interfaces : DB44M to 2 DB25F, 1m
CA-DB44M-DB25F-DB15F-1	Cable for QX3440-6RS-4SERIAL, for 1 X21 and 1 RS232/RS422 interfaces : DB44M to 1 DB15F and 1 DB25F, 1m
CA-RJ45-DB25F-1	Cable RJ45 to DB25F, RS232 async, 1m
PAN-1U-16DB15M-DB15F	1U 19" panel with 16 DB15M/DB15F
PAN-1U-16DB25M-DB25F	1U 19" panel with 16 DB25M/DB25F
PAN-1U-8DB15F-8DB25F	1U 19" panel with 8 DB15M/DB15F and 8 DB25M/DB25F

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