TOTAL CONTROL™

Quad V.34 Modem Card

Version 3.1

RELEASE NOTES

New Features as of Release 3.1

PRI Support

PRI support is for chassis with E1/PRI cards. A new setting in the modems allows analog calls coming in through the PRI card to be channeled to a gateway card or out the Quad Analog NIC RS-232 port. Modems support PRI in answer mode only. They can not originate calls across PRI lines.

Line Source

AT Command: %D2
MIB Extension: mdmLiSrc
TCM: Line Interface Source from the Line Interface Options Configuration Group

Changes the line source to PRI TDM. You must then store settings to the modem's NVRAM and reset the modem for it to take effect.

Features as of Release 2.0

Transmitter Level Adjustment

AT Command: S39
MIB Object: mdmLiTransmitLevel
TCM: Line Interface Options modem parameter group

Transmitter level has a possible range of -9 to -20 dBm for analog line sources and -3 to -30 dBm for digital E1/T1 line sources. The default setting of -11 dBm (S39=11) provides optimal performance for most analog line sources. A setting of -13 dBm (S39=13) is recommended for calls over digital E1, T1 or PRI lines.

V.34 Extended Link Rates

Enhanced V.34 software offers two new link rates: 31.2 Kbps and 33.6 Kbps. While line conditions may not always allow for 33.6 connections, the new V.34 software can improve your average connection rate, making it more likely to achieve and maintain 28.8 connections.

Requirements

33.6 Kbps connections are only possible with other 33.6 Kbps-compatible U.S. Robotics modems.

New Parameters for V.34 Extended Link Rates

Link Rate Speed Select

Added 31.2 Kbps and 33.6 Kbps settings (&N15 and &N16) for fixed connection rates.

V.34 Extended Link Rates Disable

AT Command: S56.5=*1*
MIB Object: mdmScV34pModeEnable
TCM: Signal Converter Settings modem parameter group

Disables the modems' capability to connect at 31.2 Kbps and 33.6 Kbps.

Result Codes

If you have enabled result codes, 31.2 and 33.6 Kbps connections report the following verbal connect messages and numeric result codes to the DTE.

Verbal	Numeric
CONNECT 31200	151
CONNECT 31200/ARQ	152
CONNECT 31200/V34	153
CONNECT 31200/ARQ/V34	154
CONNECT 33600	155
CONNECT 33600/ARQ	156
CONNECT 33600/V34	157
CONNECT 33600/ARQ/V34	158

Inquiry Displays

The ATI6 diagnostic screen has an extended protocol field that displays the actual block and window sizes, and indicates when selective reject has been negotiated. The I11 screen displays "V34+" for connections with other U.S. Robotics modems using the new V.34 software.

Selective Reject

This feature works under V.42 error control and offers significant throughput improvements over noisy lines. Selective reject reduces the number of retransmitted blocks due to block errors (blers).

Selective Reject Disable

AT Command: S51.6=1

NOTE: *Not currently configurable through SNMP.*

Cellular

Cellular support is an added cost feature for Quad Modem Cards. Modems with cellular support can negotiate for either of two cellular protocols: ETC and MNP10. These protocols are designed to combat a variety of link establishment and data transfer problems specific to cellular calls.

For those who purchased cellular support, a booklet was included with the modem card that explains how to use the ETC and MNP10 protocols.

If you did *not* purchase cellular support with the modems, but wish to add this feature to your Quad 2.0 modem cards, it is possible to enable cellular through the chassis NMC in managed racks. For unmanaged racks, the modems must be returned to the factory. For more information on the purchase of cellular support, please contact your distributor or U.S. Robotics sales representative.

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