

CDM-Qx Satellite Modem

Software Version 1.1.6
Product Bulletin
December 12, 2005

A new software release is now available for the CDM-Qx Multi-Channel Modem with DoubleTalk™ Carrier-in-Carrier™. Below is a summary of the new functionality offered in Version 1.1.6, which can be downloaded from our web site.

Spectrum Analyzer

The CDM-Qx now offers a built-in Spectrum Analyzer. The spectral plot is viewable on a computer using the Ethernet M&C port on the CDM-Qx and a Windows-based software application. In order to operate this transmission analysis function, the DoubleTalk Carrier-in-Carrier FAST option must be purchased. Additionally, the Windows-based software application is required to display the spectrum, which can be downloaded from the CDM-Qx Version 1.1.6 zip file available on our web site.

Note: If the DoubleTalk Carrier-in-Carrier FAST option is not purchased, the Spectrum Analyzer can be run in demo mode for 7 days.

Additional Forward Error Correction

For added compatibility with existing, installed Comtech EF Data modems, the available forward error correction capabilities are expanded beyond 2nd Generation Turbo Product Coding (TPC). Viterbi Concatenated with Reed-Solomon is now supported. Additionally, Trellis Coded Modulation (TCM) is supported with Reed-Solomon and 8-PSK. Reed-Solomon operation is standard, while 8-PSK is a FAST option.

Other Enhancements

Rolloff

• In addition to the standard 35%, Transmit and Receive Rolloff of 20% is now available. The 20% rolloff is more sensitive to other link impairments, but it can improve the adjacent channel spacing.

Front Panel Menu Options

- Front panel selection for EIA-530 RTS/CTS mode in simplex (Tx only or Rx only) operation is now available.
- Front panel menu support is now offered for HSSI handshake signal (TA/CA) control.

DoubleTalk™ Carrier-in-Carrier™

• The DoubleTalk Carrier-in-Carrier max search delay range has been restricted to 330 ms, since typical geostationary satellite trip delay does not exceed this range.

Low Data Rates

 Low data rates down to 32 kbps are now supported for BPSK and QPSK, regardless of the type or forward error correction. 8PSK and 16-QAM are limited to 128 ksps. And, the minimum symbol rate for DoubleTalk Carrier-in-Carrier is still 128 ksps.

For additional detail on the CDM-Qx v1.1.6, please refer to the release notes available on our web site.

If you have any questions about this release, please contact your Comtech EF Data sales associate.

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