



Gigabit Ethernet Interface for CDM-700/700L Modem

Release 1.1.10

Software Release Notification

Gigabit Ethernet Interface Release 1.1.10 for CDM-700/700L Modem

Approval Signatures			
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Applicability
Bulk release 1.1.10 (FW12738B) for Gigabit Ethernet Interface for CDM-700 and CDM-700L Modems.

Revision History			
Rev #	Description	Date	Prepared by
-	Initial Release, version 1.1.8	02/16/2007	Christian Tabora
A	Release version 1.1.9	06/28/2007	Christian Tabora
B	Release version 1.1.10	12/04/2008	Christian Tabora

FSCM No. 4J515

Table of Contents

INTRODUCTION.....	3
FEATURES.....	3
FIXES.....	4

Introduction

Version 1.1.10 adds user selectable speed and duplex selection for GBEI interface.

Note that upgrading to this version of GBEI requires a complimentary upgrade to base modem version 1.3.1. All normal upgrading instructions should be followed but should be done in the following order:

Upgrading to GBEI version 1.1.10 (and base unit version 1.3.1):

- 1) Upgrade GBEI
- 2) Upgrade base unit
- 3) Reboot unit

When downgrading from version 1.1.10 and 1.3.1:

- 1) Downgrade base unit
- 2) Downgrade GBEI
- 3) Reboot unit

Save all configuration information external to the modem before upgrading the CDM-700 base modem FW to 1.3.1 and Gigabit Ethernet FW to 1.1.10. The new FWs require reentering of configuration parameters into the CDM-700 completing both FW upgrades.

Features

This release adds:

- Speed and duplex selections for PHY.
- Replaced statistics counters.
- New FPGA load.
- Added improvements to support revised GBEI statistics display.
- Improved ingress Ethernet PDV (packet delay variation) immunity.
- Resolved an issue causing corrupt packet FCS (Frame Check Sequence) on egress packets.

CDM-700 Features

Base Unit	GBEI	Description
X	X	LAN and WAN collision statistics added to browser and SNMP but not to RS-232/485: WAN Discards (In), demodulator to WAN WAN Collisions (In), demodulator to WAN LAN Discards (In), LAN to Gigabit Card – note, formerly ‘FPGA Overrun Errors’ LAN Collisions (In), LAN to Gigabit Card The following parameters were removed: LAN Jabber (In) LAN Undersize (In) Mng Jabber (In) Mng Undersize (In)
X		Added Frame Error Rate (FER) statistic

Base Unit	GBEI	Description
X		Modified web browser interface report of statistics in a 2 column by 10 element format
X		Management Ethernet Port: added auto-negotiate.
X	X	The following are available on the Gigabit Ethernet port: 1) Full 10/100/1000BASE-T (auto-negotiation) – existing feature earlier releases 2) 100BASE-T Full Duplex operation (manual) 3) 100BASE-T Half Duplex operation (manual) 4) 1000BASE-T Full Duplex Master operation (manual – debug only) 5) 1000BASE-T Full Duplex Slave operation (manual – debug only)

Fixes

CDM-700 Fixes

Base Unit	GBEI	Description
X		Data interface parameters were not clearing automatically: When the modem is powered down and the data interface removed from an interface slot not all parameters were cleared. This left unused data tributaries into the framer (multiplexer) enabled.
	X	FPGA Overrun Errors: Corrects the Tx data buffer so ingress data into the modem handles larger burst interval (BI) between data bursts at line rate. FPGA Overrun Errors is now relabeled LAN Discards (In). It still represents Tx buffer overflow.
X		Changed Eb/No report to indicate Eb/No>xx.x dB when upper Eb/No limit is reached. Changed BER report to indicate BER<x.xE-y when upper Eb/No limit is reached
X		Corrected Eb/No sometimes sticking at maximum value
X		Fixed a bug where viewing of Gigabit Interface parameter Info menu caused Gigabit Interface to reset.
	X	CRC errors occur on some links: Fixed the occurrence of CRC errors by increasing inter-frame gap (IFG) above the minimum.