

Monitors Data Communication Line Status

Synchronous and Asynchronous Mode of Operation

Supports V.24, V.35, V.36, RS-449, RS-485, EIA-530 and EIA-530A Interfaces

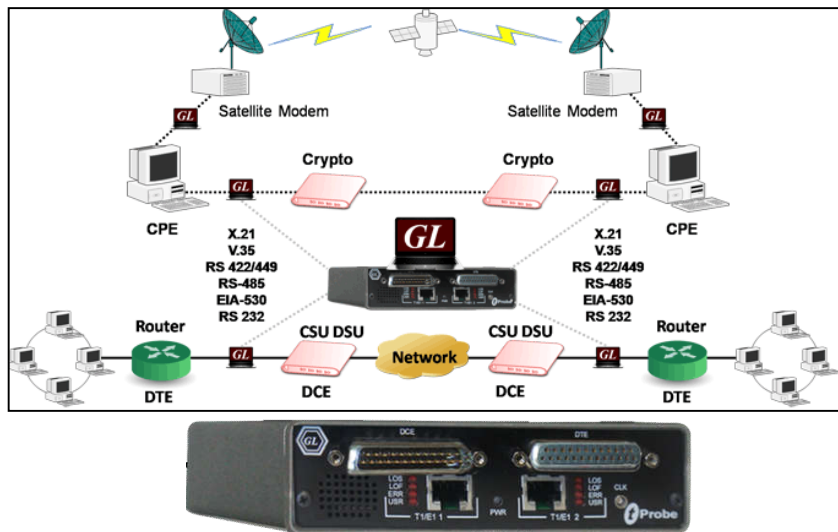
Test Channel Service (CSU) & Data Service Units (DSU)

Supports Data Source and Data Sync Channel Types

X.21 Support Coming Soon

Parallel or Serial Type Transfer of Data Transmission

Datacom Analyzer



概述

所谓数据通信就是指从承载在通信通道的数据信息传输到给定数据源的外部设备。数据传输类型包括并行或串行传输。当需要远距离传输数据时，利用串口类型传输更加灵活，因为它允许更高的传输数据流以及更经济的成本。串行数据本质上支持同步和异步两种传输模式。

Datacom Emulator/Analyzer 硬件是GL tProbe产品的一款子系统，主要用于测试和验证数据通信设备和线路，特别是那些提供时钟，数据和控制信号的串行接口。这些设备普遍应用于军事联系，卫星链路，广域网以及数据调制解调接口。通过不同的可选功能配置可实现仿真DTE，DCE设备以及非插入式同/异步模式监控。通过各种物理接口线缆可实现各种环境的测试。

更多内容可参考网站 <http://www.gl.com/tprobe-datacom-analyzer.html>

主要特性

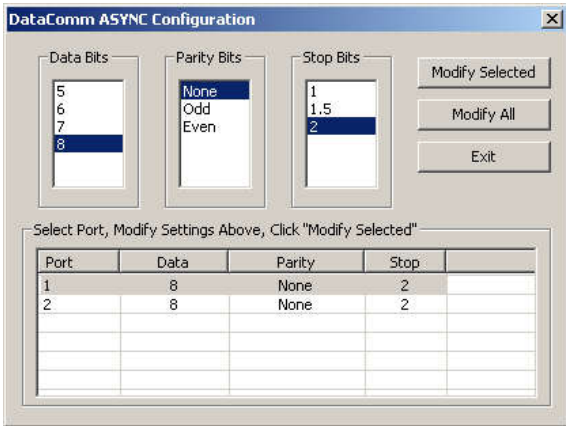
- 支持的数据接口包括 - V.24, V.35, X.21, RS-449, RS-485, EIA-530 以及EIA-530A
- 支持DTE或DCE模式仿真
- 允许用户自定义测试速率.
- 支持PPP Analysis, HDLC Analysis, 以及Frame Relay Analysis等协议分析.
- 支持 HDLC Tx/Rx Test 收发测试以及HDLC Impairment Utility损伤仿真测试
- 支持从300 b/s 带16.384 Mbps的同步误码测试
- 支持从300 b/s 到115.2 Kbps异步误码率测试
- 支持NRZ, FM0, FM1 以及差分曼切斯特 (Differential Manchester)等编码方案
 - Manchester IEEE BER from 75 b/s to 115.2 Kbps
 - Manchester GE Thomas BER from 75 b/s to 115.2 Kbps
 - NRZI BER from 0.5 Mbps to 10 Mbps
 - Differential Manchester BER from 75 b/s to 115.2 Kbps
 - Manchester FM0 and FM1 BER from 75 b/s to 115.2 Kbps
- 支持同步时钟源

 **GL Communications Inc.**

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异步配置说明

Configuration functionality allows to configure various Tx/Rx parameters such as Data Bits, Parity Bits, and Stop Bits.



图形: 数据口异步配置

监控控制信令和频率特性

Displays the following signal activity on the Datacom DCE and DTE interfaces along with the frequency measurements for each port.

RXD: (Received Data) - This is the serial encoded data received by a DTE from a DCE which has in turn received from another source.

RXC: (Receive Complete) - The RXC bit will be set to HIGH(1) when data is received and is available in the buffer.

TXC: (Transmit Complete) - The TXC bit is set to HIGH(1) when a transmission is completed and there is no other data to send.

CTS: (Clear to Send) - This is set to HIGH(1) by a DCE to allow/prevent the DTE to transmit data. This is called hardware flow control or hardware handshaking.

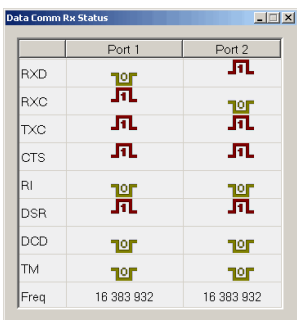
RI: (Ring Indicator) - This signal is used for auto answer applications. DCE raises when incoming call detected.

DSR: (Data Set Ready) - This should be set to HIGH(1) by a DCE whenever it is powered on. It can be used by the DTE to determine that the DCE is on line.

DCD: (Data Carrier Detect) - This is set to HIGH(1) by a DCE when it detects the data carrier signal on the datacom line.

Frequency: Displays operating Frequency in Hertz

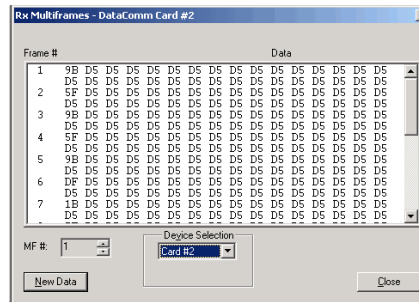
TM: (Test Mode)



图形: 监控数据端口状态

监控多帧特性

This application permits viewing unframed data on a Datacom port. Approximately 2 seconds of data is captured for viewing.

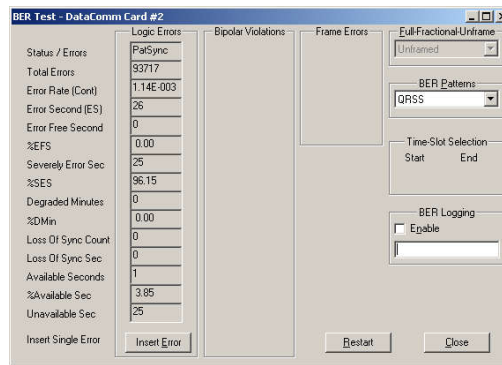


图形: 监控多帧

侵入式测试应用

误码率测试

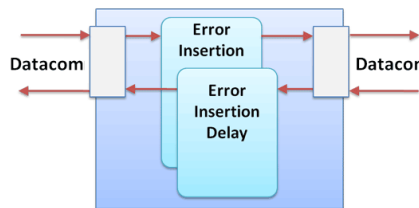
The Bit Error Rate Test (BERT) application generates/detects Pseudo Random Bit Sequence (PRBS) for testing performance of data communication circuits.



图形: 误码率测试

错误插入特性

The Error Insertion application permits inserting single, fixed, automatic, random, and burst error into the incoming or outgoing bit stream.



图形: 错误插入特性方框图

精准延时测量特性

Precision Delay Measurement measures the Round Trip Delay of a system. Sending a BER pattern with the insertion of an error bit and timing the reception of the error bit do the Round Trip Delay measurement. Measurement is precise and accurate to the microsecond level. A delay up to 8 seconds can be measured.

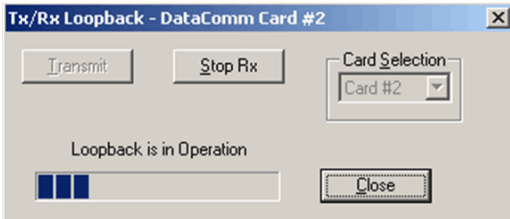


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TX/RX 环回特性

This application is used in conjunction with a Bit Error Rate Test to verify the operation of Cards and Laptop units.



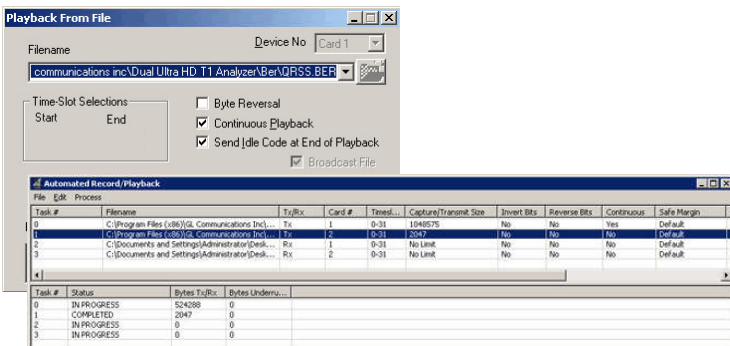
图形: 增强型误码率测试

捕捉和回放可选特性 (XX020)

捕捉/回放功能

This optional software (XX020) permits record/playback to/from file across DTE/DCE interfaces. The applications provided are: Playback from File, Record Data to File, Record from Multiple Cards, and Automated Record/Playback. Typical applications include transmission or reception of prerecorded video files, traffic loading applications and protocol analysis.

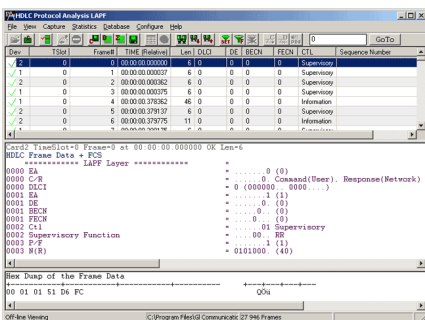
自动化捕捉/回放功能 (ARP) is an extremely versatile application that runs several transmit or receive operation tasks



图形: 通过文件回放

协议分析可选特性

GL's Datacom Analyzer supports following protocol analyzers- HDLC, PPP, and Frame Relay. GL's protocol analyzers can monitor signaling interactions on data communication networks and provide detailed decodes and statistics. For the respective



图形: HDLC 协议分析特性

环回测试特性

- **No Loopback** - This option disables any existing loopback conditions.
- **Outward Loopback** - In this configuration the data sent from the CSU are received by the Datacom interface and are immediately retransmitted to the CSU.
- **Diagnostic (Input + Output) Loopback** - Loops the internal transmit clock and data to the internal receive clock and data along with looping the external clock and data back to the incoming device.
- **Cross-port Loopback** - It takes the Rx data from the DTE and places it on the Rx of the DCE. It also takes Rx data from the

购买指南

- [PTE001](#) - tProbe Analyzer (Dual Ports)
- [PTE025](#) - Datacom Analyzer for RS-232C, RS-449, RS-422, RS-423, EIA-530, V.35 Interfaces
- [PTE002](#) - Datacom Only Analyzer (with DTE and DCE Ports)
- [SA000c](#) - High Stability Internal Clock Option

相关配件

- [DBC001](#) - DB25 3 FT MALE TO MALE
- [DBC002](#) - DB25 3 FT FEMALE TO FEMALE
- [DBC003](#) - DB25 3 FT MALE TO FEMALE
- [DBC004](#) - DB25 FEMALE TO DB37 FEMALE 3FT
- [DBC005](#) - DB25 MALE TO DB37 MALE 3FT
- [DBC006](#) - DB25 FEMALE TO V.35 FEMALE 3 FT
- [DBC007](#) - DB25 MALE TO V.35 MALE 3 FT
- [DBC008](#) - DB25 FEMALE TO DB15 FEMALE 3 FT
- [DBC009](#) - DB25 MALE TO DB15 MALE 3 FT

相关软件

- [PTE020](#) - Record/Playback File Software (Including Automated Continuous Capture and Automated Record Playback Software)
- [PTE090](#) - Datacom Real-time HDLC Decode / Store Software
- [PTE135](#) - Datacom PPP Analyzer
- [PTE130](#) - Datacom Real-time Frame Relay Analyzer

相关硬件

- [LTS010](#) - LinkTest™ DualE1
- [LTS011](#) - LinkTest™ DualE1 with Datacom ports
- [LTS012](#) - LinkTest™ DualE1 with Datacom ports and Jitter/Wander and Pulsemask
- [LTS001](#) - LinkTest Single Hand Portable Single T1E1 Test set
- [LTS002](#) - LinkTest Single Hand Portable Single T1E1,T3E3 Test set
- [LTS003](#) - Portable Dual T1E1,T3E3 Test set with full color display



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