Introducing USB Based T1 E1 Analyzer Unit
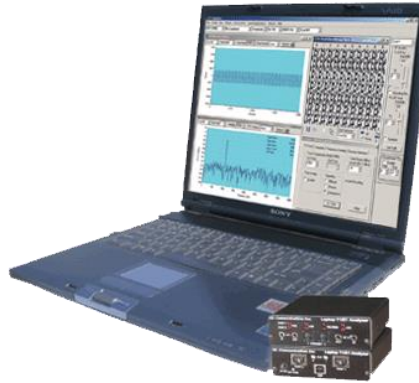
GL Communications Inc.

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Portable USB T1 E1 Analyzer Unit

- T1 and E1 variants for basic testing needs.

- Optional features that extend the capability far beyond the most expensive T1 / E1 testers.

- Lightweight, small footprint, easy to carry in the pouch of a Notebook PC - perfect for air travel.

- Connects to a PC via a USB 2.0 port.

- Access it remotely.

What the unit does ?

- Used for installation, test, and troubleshooting of T1 or E1 lines.

- Capability of T1 or E1 PCM signal visualization, capture, storage, analysis, and emulation.

- Includes BERT, voice band analysis, data, signaling, and protocol analyzer all in one.

- Most all "Basic Applications" and "Special Applications" are available for USB Based T1 E1 Analyzer including Comprehensive Analysis / Emulation of voice, digits, tones, fax, modem, raw data, and Echo Testing.

- Capable of simulating as well as decoding and demodulating fax calls over T1/E1 lines using Fax Simulator and FaxScan™.

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Why the product is superior?

- Small package packs big performance

- Scalable

- Cost effective

Benefits

- Compatibility with Windows® 10 OS with user-friendly real-time software.

- USB 2.0 interface for complete access to T1 or E1 rate signals.

- Lightweight (less than 2 lbs) and small footprint (5" x 4" x 1.5"), convenience of using with a Notebook PC.

- Scalable - extremely simple to very complex configuration (with optional software).

- Instant field upgradeable with software download.

- Cost effective - one small footprint platform can do everything.

- Two (2) ports and four (4) ports captures of T1 and E1 signals with one or two USB T1 E1 Analyzers connected to a single PC.

T1 / E1 Basic Software

- T1 E1 Configuration Options

- VF Options

- Monitoring Options

- Intrusive Testing

- Windows Client / Server - Remote access to T1/E1 server ; Clients - C++, C#, TCL

- T1E1 Line Interface Options

  - ➢ Framing Formats

  - ➢ Tx Rx Configurations

  - ➢ Clock options

  - ➢ Loop-backs

  - ➢ Monitor T1/E1 Line

  - ➢ Connection Options

  - ➢ Encoding Options

- VF Options

  - Speaker

  - Drop and Insert

  - VF In / Out TS settings

- Monitoring Features

  - Monitor T1/E1 Line

  - Byte Values & Binary Byte Values

  - Signaling bits, Power Level, DC Offset, & Frequency

  - Multiframes, and Real-time Multiframes

  - T1/E1 Data as Real-time Bitmap

  - Time-slot Window

- Monitoring Features…

  - ASCII Timeslot Display

  - Oscilloscope & Power Spectral

  - Audio Monitoring

  - Active Voice Level

  - Capture Dialed Digits

  - Realtime Strip Chart

  - Realtime Multichannel Audio Bridge

  - Signaling Bit Transitions

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Monitoring Features

Oscilloscope Display
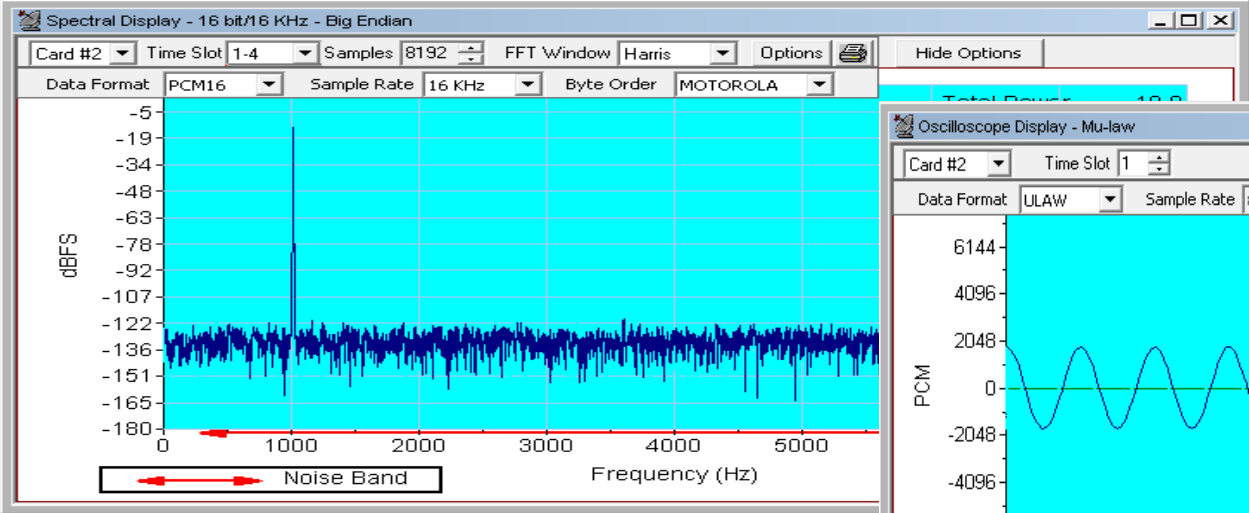
Spectral Display
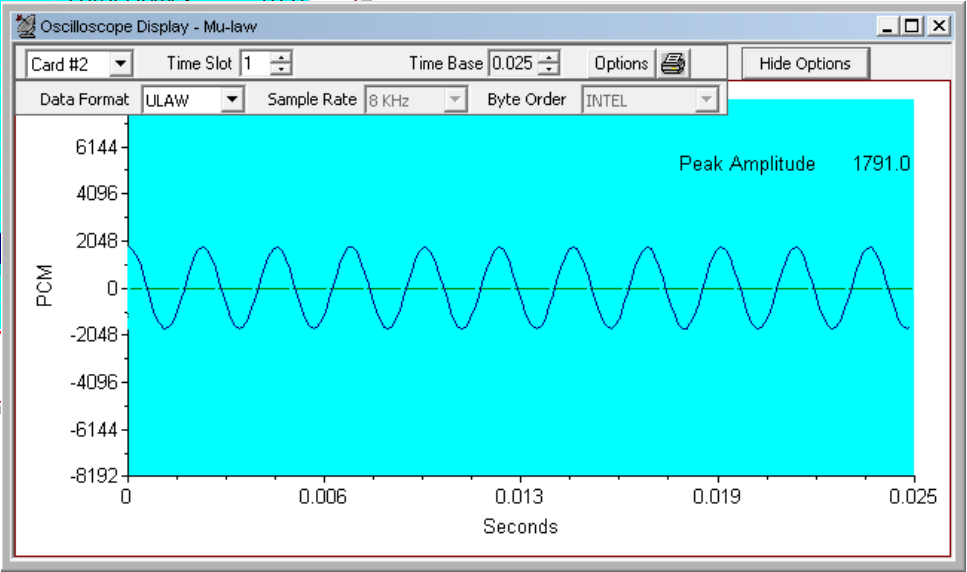
- Intrusive Tests

  - ➤ Bit Error Rate Test

  - ➤ Enhanced Bit Error Rate

  - ➤ ATM BERT

  - ➤ Transmit Tone

  - ➤ Transmit Gaussian Noise

  - ➤ Transmit Multiframe

  - ➤ Transmit Signaling Bits

  - ➤ Precision Delay Measurement

  - ➤ Rx-to-Tx Loop back

  - ➤ Error Insertion

  - ➤ Transmit Dialing Digits

Enhanced BERT and Tx Signaling Bits

Enhanced BERT
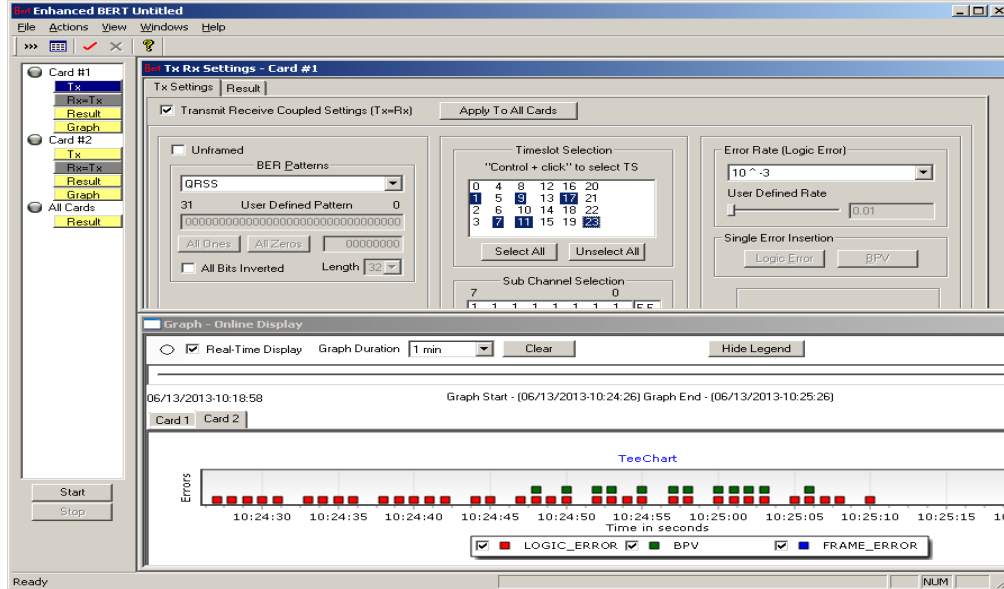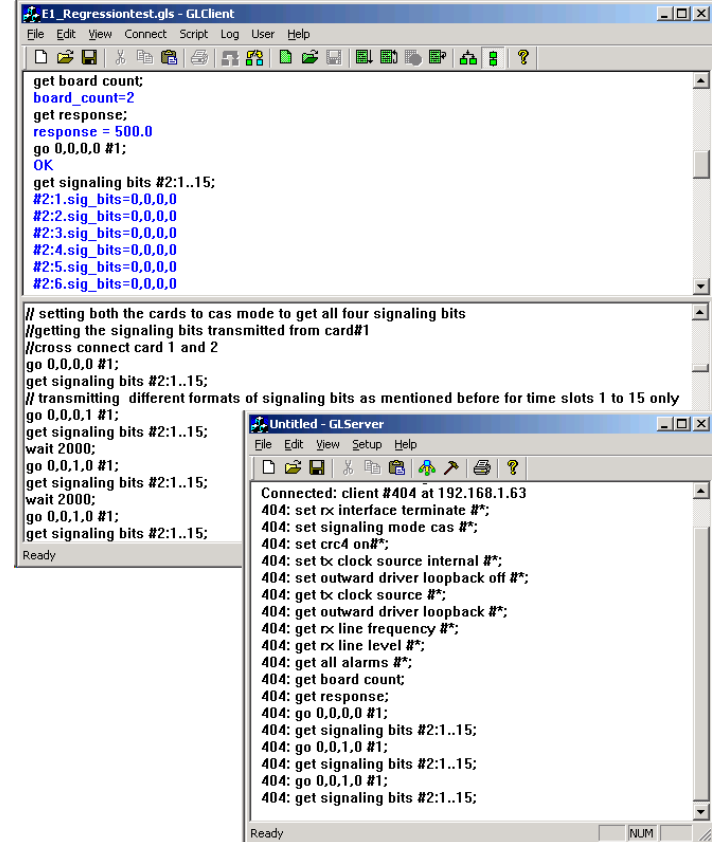
T1 or E1 Basic Software
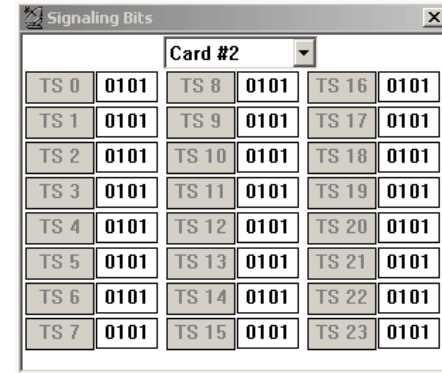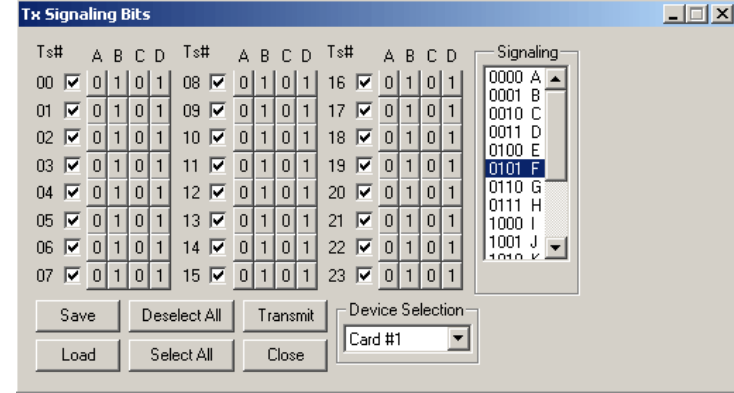
Client Server

- Allow the user (with an appropriate client) to operate analyzers remotely, write scripts for automation, or provide multi client connectivity to a single T1 E1 VF Data analyzer.

T1 / E1 Special Applications

- Protocol Analysis

  ➢ ISDN, HDLC, SS7, Frame Relay, TRAU, CDMA, DCME, T1 Facility Data Link.

  ➢ E1 Maintenance Data Link, UMTS, PPP, ATM, GSM, V5.x, CAS, GPRS, GR303, SS1.

- Protocol Emulation

  ➢ ISDN, HDLC, MLPPP, MLPPP Conformance, CAS, TRAU, SS7.

  ➢ SS7 conformance suite, GSM A, GSM Abis, MAP, CAMEL, Frame Relay,

  ATM IMA, and SS1.

  ➢ Capture, Analysis, & Emulation

  – BER / Playback.
  – Manual & Automated Record / Playback files.
  – Call Capture and Analysis (CCA).
  – Multiple Call Capture and Analysis.

- Voice Band Analysis Software
  - Call Data Records (CDR)
  - Voice Band Analyzer (VBA)
- Fax Emulation and Analysis
  - Fax Simulator
  - Fax Analysis using GLInsight ™ or FaxScan™
- Echo Cancellation Testing / Compliance
  - Manual
  - Semi-automated
  - Automated

- WCS Modules
  - Transmission/reception of files/digits
  - Multi-channel BERT
  - CAS Emulation
  - DSP operations, Dynamic DSP capability
  - SA Bits/ FDL/ HDLC/ TRAU/ MC-MLPPP/ SS7/ ISDN / ML Frame Relay
- Protocol Identifier
- Multi-Channel BERT
- Multiplex / Demultiplex Software
- Network Surveillance

Special Applications

Protocol Identifier
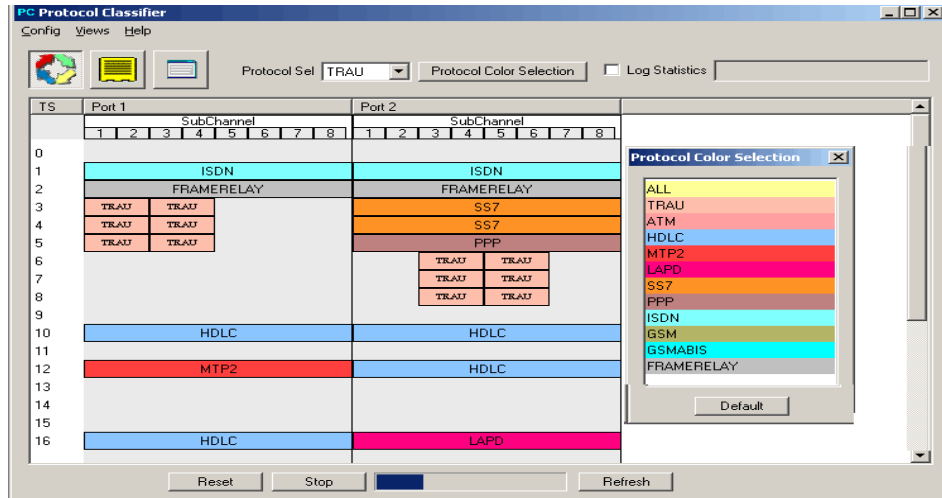
SS1 Analyzer and Emulator
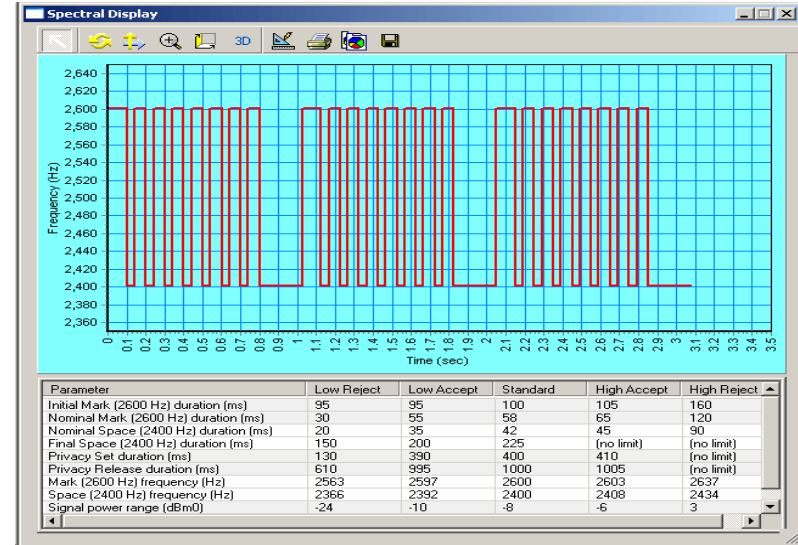
Call Capture and Analysis

Call Capture and Analysis

Multi Call Capture and Analysis

Protocol Analysis

PPP Protocol Analysis

PPP Packet Data Analysis

Protocol Analysis...

TRAU Packet Data Analysis - Active Calls Graphs
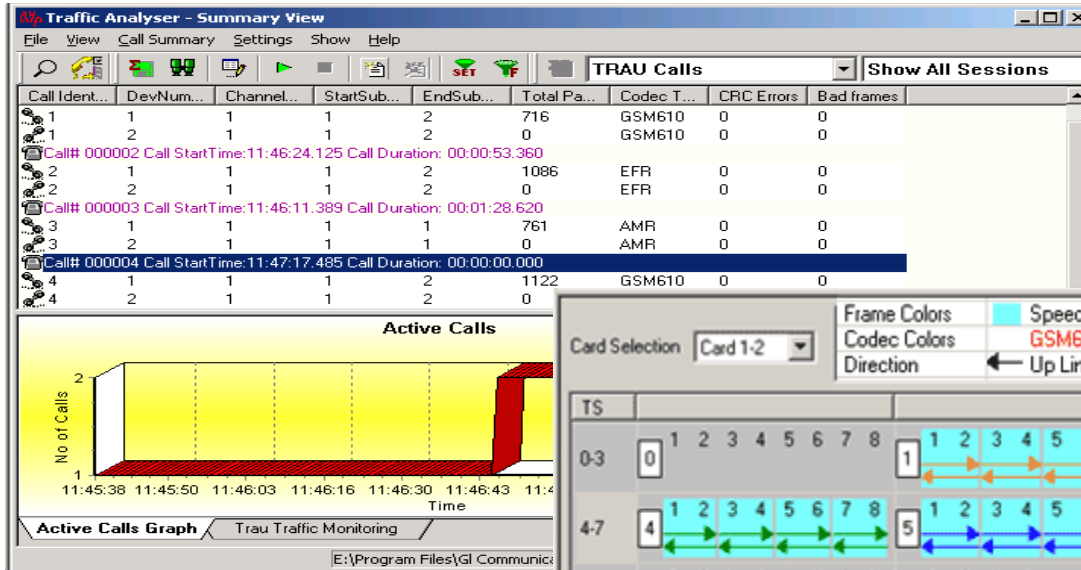
TRAU Traffic Monitoring
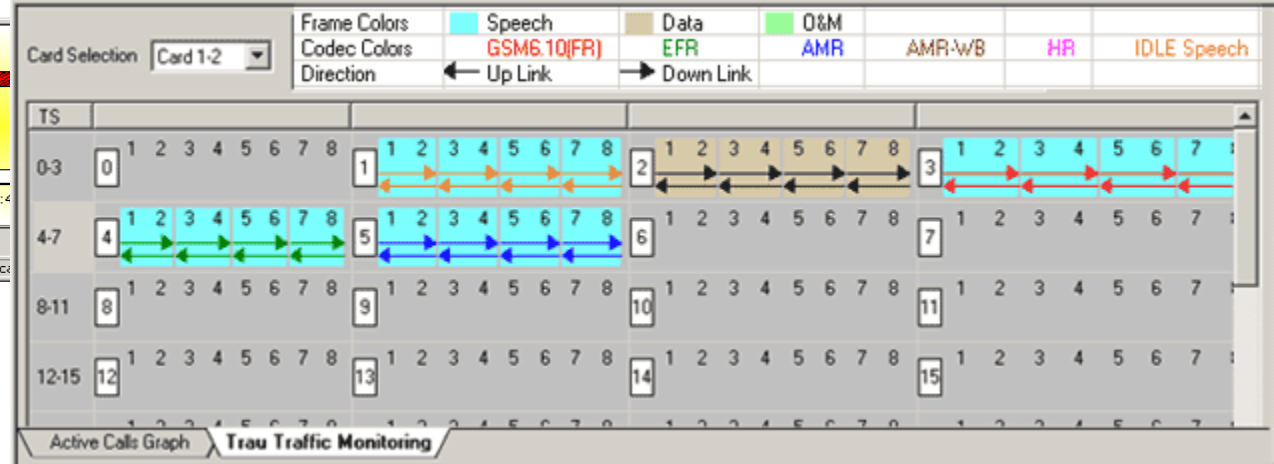
Protocol Emulation

GSM Call Generation

GSM Call Reception

Thank you