

# *GL Communications Inc.*

## **T1 / E1 Analysis Emulation Products Price List**

Revised: Sep 21, 2017

Part Number	Description	Notes
TTE001 TUT001 TUE001  TUTxxx TUExxx  TTE002 TTE003	tScan16 Express Card  T1 16 Port License for Basic Software E1 16 Port License for Basic Software  Optional Software Apps for T1  Optional Software Apps for E1  16-Port Breakout Box and Cable 19" Rackmount Kit for Breakout Box	16 port T1 E1 Receive Only Card – w/ GL Windows software and optionally Linux API, requires TTE002 Basic Software License for T1 Basic Software License for E1  Optional Software Applications for T1, 1x per 16 TS, 2x per 32 TS..., see Note 3 Optional Software Applications for E1, 1x per 16 TS, 2x per 32 TS..., see Note 3  Cable and Breakout Box for 16 RJ-48 Interfaces 19" Rack Mount Kit for Breakout Box  **If Multiple Cards, then All Must be Licensed with Basic Software License**
FTE001 ETE001  ETA008 ETA004 ETA002 ETA001 ETAxxx ETA003  EEA008 EEA004 EEA002 EEA001 EEAxxx EEA003	QuadXpress T1 E1 (Main Board) QuadXpress T1 E1 (Daughter Board)  Eight Port License for T1 Four Port License for T1 Two Port License for T1 T1 Basic Software – required for T1 Optional Software Apps for T1 Timeslot Delay Loopback for T1  Eight Port License for E1 Four Port License for E1 Two Port License for E1 E1 Basic Software – required for E1 Optional Software Apps for E1 Timeslot Delay Loopback for E1	Quad Port T1 E1 Main Board w/PCle (x1) Interface – requires ETA00x or EEA00x licenses Quad Port T1 E1 Daughter Board – requires FTE001 Main Board and ETA00x or EEA00x licenses  Eight T1 Ports Licensed Four T1 Ports Licensed Two T1 Ports Licensed Basic Software for T1 – required with T1 licenses Optional Software for T1 – most special apps avail. Driver Implementation for Delay and Channel Loopback (up to 192 timeslots, 0 to 4000 ms/channel)  Eight E1 Ports Licensed Four E1 Ports Licensed Two E1 Ports Licensed Basic Software for E1 – required with E1 licenses Optional Software for E1 – most special apps avail. Driver Implementation for Delay and Channel Loopback (up to 192 timeslots, 0 to 4000 ms/channel)  <b>**If Multiple Main Boards, then All Must be Licensed with Personality License**</b>
XTE001  XUT001 XUE001	Dual T1 E1 Express Card  Dual T1 E1 Express Card Basic T1 Software Dual T1 E1 Express Card Basic E1 Software	Dual T1 E1 Card w/PCle (x1) Interface – supports pulse mask and jitter functions; requires XUT001 or XUE001 for each card; special apps licensed per system  w/Basic Software for WIN 7 / 8.1 w/Basic Software for WIN 7 / 8.1  <b>**If Multiple Cards, then All Must be Licensed with Basic Software License**</b>
HTE001	HD Universal Dual T1 E1 Card	Universal Dual T1 E1 Card – supports pulse mask and jitter functions; requires HUT001 or HUE001 for each card; special apps licensed per system

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HUT001 HUE001	HD Universal Card Basic T1 Software HD Universal Card Basic E1 Software	w/Basic Software for WIN 7 / 8.1 w/Basic Software for WIN 7 / 8.1  <b>**If Multiple Cards, then All Must be Licensed with Basic Software License**</b>
HDT001 / HDE001 SA000a	High Density Dual T1 or Dual E1 Card  High Stability Internal Clock Option	Legacy - High Performance Dual T1 or E1 Card  +/- 1 ppm Internal Clock
UTE001 UTA001 UEA001 SA000c	Dual Laptop T1 E1 Hardware USB Base Unit Basic Laptop T1 Software Basic Laptop E1 Software High Stability Internal Clock Option	Portable USB Unit - requires UTA001 or UEA001 W/ Basic Software for WIN 7 / 8.1 W/ Basic Software for WIN 7 / 8.1 +/- 1 ppm Internal Clock  <b>**If Multiple Units, then All Must be Licensed with Basic Software License**</b>
PTE001 PTA001 PEA001 SA000c	tProbe Analyzer (Dual Ports) T1 Software for tProbe E1 Software for tProbe High Stability Internal Clock Option	Portable USB Unit – requires PTA001 or PEA001 w/Basic Software for WIN 7 / 8.1 w/Basic Software for WIN 7 / 8.1 +/- 1 ppm Internal Clock
PTE015	w/ 2Wire FXO and FXS Optional Board	2Wire FXO FXS Board – T1 and E1 – uses xx600, requires xx624 (MAPS FXO FXS)
PTE025	w/ Data Communications Optional Board	Data Communications Board for Interfaces RS-232, RS-449, EIA-530, V.35, and many others – <b>see separate DataCom price list</b>  <b>**If Multiple Units, then All Must be Licensed with Basic Software License**</b>
<b><i>The Following Software is Available for T1 E1 Analyzer Cards and USB Based Analyzer Units</i></b>		
XX012	Pulse Shape & Jitter Generation / Measurement	Easy, accurate, visual pulse shape and jitter generation / measurement of T1 E1 signals (Universals, tProbes, Express platforms); included with basic software
XX010	API Development Software Toolkit (Windows) (Programmers Guide)	Develop applications for T1 or E1 Products for Windows Platforms; Requires C++ dev skills
XX011	API Development Software Toolkit (Linux)	Develop applications for T1 or E1 Products for Linux Platforms; Universal Card Only; Requires C++ dev skills
XX017	Real-Time Multi-Channel Audio Bridge	Streams audio to/from TDM channel(s) from/to sound device(s) in a PC system; supports A-law, u-law, G.726 (16, 24, 32, 40 kbps), G.722; included with basic software

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XX018	Multi-Channel BERT Software	Simultaneous and Independent BERT's on many sub-channels, timeslots, and hyperchannels
XX019	Transmit / Receive File Utility Software	Non-GUI Application utility for file transmit and receive over T1 E1; a similar versatile GUI application is also provided
XX020	Record / Playback File Software	File Capture & Transmit over T1 E1 plus a versatile Automated capture/transmit application and Synchronous Trunk Record Playback Application; includes STE040 Mux / De Mux Software
XX021	FDL Software for ESF (T1 Only)	Facility Data Link Tx/Rx over ESF links
OLV021	Offline FDL Analysis Software for ESF (T1 Only)	Offline FDL Analysis Software for T1 ESF Links
XX022	DTMF/MF/MF-R2 Detector and Generator Software	Tx/Rx DTMF/MF/MFC-R2 Digits with Detailed Analysis, included with basic software
XX023	E1 $\mu$ -Law Software or T1 A-law Software	Operation of T1 Systems with A-Law and E1 Systems with $\mu$ -Law; included with basic software
XX050	Signaling Bits Recorder Software	Record/Display ABCD Signaling Bits – All Channels, included with basic software
XX024	Real-Time Strip Chart	Real-Time Display of Calls with Synchronized PCM and Signaling Display, included with basic software
	<b><i>Call Capture &amp; Analysis Software Options</i></b>	
XX031	Enhanced T1 / E1 Call Capture/Analysis Software	CCA with traffic based call triggering. Trigger and capture on specific traffic types e.g. fax, specific modems, voice, and tones such as dial, busy, ring back, , includes CMU031; requires license for XX030
CDR032	Call Data Records	Provides detailed and complete call information for every call including detailed signaling, alarm, and voiceband events. Requires and works with Multiple Call Capture xx031, or PacketScan PKV100, or PPP/ML-PPP xx135 and xx136. Also requires VBA032 and VBA036; requires dongle(s)
CMU031	Call Management Utility	Organize, play, and view captured calls from XX031 software – requires dongle, included with XX031

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<b><i>Voice Band Analysis Software Options</i></b>		
VBA032	Voice Band Analyzer	Analyze voice band parameters e.g. speech level, echo, noise, etc. required for CDR032, requires dongle, PKB070 is included
VBA033	Two-Wire Echo Analysis for VBA	Analysis of echo on two-wire captures,
VBA036	Traffic Analysis for VBA	Analysis of voiceband traffic such as tones, fax, and call progress signals, required for CDR032, ROC
VBA038	Fax Demodulator / Decoder	Demodulates Voiceband Fax Signals (PCM) & then Decodes T.30 Fax Images; Works with captured full duplex and 2wire Fax signals; works with VBA or independently of VBA (on DOS command line),
<b><i>Windows Client/Server Software Options</i></b>		
XX600	Basic Client/Server Scripted Control Software (Included with Basic Software)	Precise & Sequential control of T1 or E1 Lines – Client/Server – Uses TCP/IP, included with basic software
XX605	Dual VF Tx Rx (Only for tProbe), previously called Simplified Audio Client	User Friendly GUI for analog / digital audio Tx/Rx functions – included with basic software, all necessary options are included except xx626
XX606	Pulse Shape & Jitter Measurement	Pulse Shape and Jitter Measurement Data of T1 E1 signals (Universal and tProbes only), included with basic software
XX610	w/ Transmit and Receive File capability	Ability to Tx Rx Files directly over T1 or E1 lines – server based; ability to Tx Rx data directly from client; includes xx600
XX620	w/ DTMF/MF/MFC-R2 + answer/place call capability	Tone and Dual Tone detection and generation and CAS signaling capability; included with basic software
XX630	w/ DSP Capability	Permits complex DSP Operations; includes xx600
XX631	w/ Dynamic DSP Capability	Permits time varying DSP Operations; includes xx600, requires xx630
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XX625	w/Channel Associated Signaling Simulator	Special Client simulates all CAS protocols, including wink-start, loop-start, ground start, R1, MFC-R2, etc. (includes xx600, requires xx610, xx620, and xx630)
XX626	w/ SS1 Signaling Analyzer and Dialer	SS1 Signaling analysis and dialer for FAA circuits; includes xx600, xx605, xx610, xx620, and xx630
XX629	w/ ISDN Emulation	Emulates call setup and teardown using ISDN

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		protocol – all variants; includes xx600 and xx640, recommended xx610 and xx620 for traffic generation and reception
XX640	w/ HDLC Encode/Decode and Remote Capture	Real-time reception and transmission of HDLC frames for Remote Protocol Analyzers; Sends and Receives HDLC frames from files; includes xx600
XX643	w/ MTP2 Emulation	Emulates endpoints using MTP2 protocol stack for building signaling systems for validation and testing; includes xx600
XX634	High Throughput HDLC Tx/Rx Test	HDLC Simulation with Large # of hyper-channels, channels, and sub-channels, with impairments; includes xx600
XX635	High Throughput PPP Tx/Rx Test	PPP Emulation, includes xx600, requires xx634
XX636	High Throughput MC ML-PPP Tx/Rx Test	MC ML-PPP and NCP Emulation - including Client GUI for MC ML-PPP Emulation - includes xx600, requires xx634 and xx635
XX655	MultiLink Frame Relay Emulation w/ Tx/Rx Test	Emulates, transmits, and receives multilink frame relay test traffic – includes xx600, requires xx634
XX654	Inverse Multiplexing over ATM (IMA) Protocol Emulation	Emulates Inverse Multiplexing over ATM (IMA) over multiple T1s or E1s; includes GUI, includes xx600
XX653	ATM-SSCOP Emulation	SSCOP Emulation over ATM
<del>XX645</del>	<del>w/ TRAU Engine (GSM – Abis)</del>	<del>Sends and Receives TRAU traffic; includes xx600</del>
XX646	w/ TRAU Tx/Rx Test	Continuity testing within payload over multiple TRAU Traffic Channels; includes xx600
XX661	LAPD Server	Emulates endpoints using LAPD protocol stack for building signaling systems for validation and testing
XX662	MAPS LAPD Conformance	LAPD Conformance testing as per ITU / ISO specifications, requires xx634
XX650	w/ SA bits Encode/Decode	HDLC frames on TS0 special bits – E1 only; includes xx600
XX660	w/ FDL	Send and Receive over ESF – T1 only; includes xx600
XX670	w/ Multi-Channel Rx BERT	Simultaneous Rx BERT on many timeslots and hyperchannels – includes xx600, requires xx610
XX680	w/Traffic Classifier	Realtime traffic classification (specific Modem Type, Fax, Voice, Digits, Digital Data, and more) - requires dongle
XX690	SS7 Protocol Decode Agent	Monitors SS7 Links, Decodes Multiple SS7 Protocol Standards, Filters User Specified Protocol Parameters, Builds CDRs, Streams over TCP/IP to remote site; specialized client required at remote site; includes xx600

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XX691	ISDN Protocol Decode Agent	Monitors ISDN Links, Decodes Multiple ISDN Protocol Standards, Filters User Specified Protocol Parameters, Builds CDRs, Streams over TCP/IP to remote site; specialized client required at remote site; includes xx600
	<b>MAPS (Message Automation and Protocol Simulation)</b>	<b>Protocol Simulation &amp; Conformance Tools for TDM</b>
XX624	MAPS FXO FXS (only for tProbe)	Emulates 2wire FXO / FXS interfaces, requires PTE015; includes xx600, xx610, xx620, and xx630 Fax emulation supported (Optional - Refer XXXFT0)
XX651	MAPS – CAS Emulation (may require CB)	Special Client simulates all CAS protocols, including wink-start, loop-start, ground start, R1, MFC-R2, etc. (includes xx600, requires xx610, xx620, and xx630); Fax emulation supported (Optional - Refer XXXFT0); <b>also available as a remote client with dongle</b> May require Channel Bank (APSCB-24 or APSCB-48) for 2wire emulation
XX652	MAPS – MC MLPPP Conformance Scripts	MC ML-PPP Protocol Conformance Scripts; includes xx600 and xx634
XX692	MAPS – GSM “A” Interface Emulation	GSM “A” Interface Emulation with detailed control, includes xx600 and xx643; requires xx610 and xx620 for traffic generation; Fax emulation supported (Optional - Refer XXXFT0)
XX693	MAPS – GSM “Abis” Interface Emulation	GSM “Abis” Interface Emulation with detailed control, includes xx600, xx661 and requires xx646 for TRAU Tx Rx
XX697	MAPS – BSC to SGSN Emulation over E1	BSC to SGSN Emulation over E1 (at BSC), includes xx600
XX698	MAPS – SGSN to BSC Emulation over E1	SGSN to BSC Emulation over E1 (at SGSN)
XX648	MAPS – ISDN Emulation	ISDN Protocol Emulation with detailed control, includes xx661 for LAPD Emulation, requires xx610 and xx620 for traffic generation; Fax emulation supported (Optional - Refer XXXFT0)
XX642	MAPS – ISDN Conformance	ISDN Protocol Conformance Test Scripts, includes xx661
XX649	MAPS – SS7 Emulation	SS7 Protocol Emulation with detailed control, includes xx600 and xx643, requires xx610 and xx620 for traffic generation; Fax emulation supported (Optional - Refer XXXFT0); <b>also available as a remote client with dongle</b>
XX656	MAPS – INAP Emulation	ITU SS7 INAP CS1 CS2 Emulation
XX694	MAPS MAP Emulation	MAP Protocol Support for interfaces B,C,D, E, F, G,

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XX699	MAPS – ANSI MAP Emulation	and H; includes xx600 and xx643; IS41 Emulation on B, C, E, F, H, Q, and N interfaces; includes xx600 and xx643;
XX647	MAPS – SS7 / ISUP Conformance Scripts	SS7 / ISUP Protocol Conformance Test Scripts; includes xx600 and xx643;
XX695	MAPS – SS7 BICC Emulation	Bearer Independent Call Control (BICC) Emulation
XX682	MAPS – IUP Emulator	BT (UK) IUP Protocol Emulation, includes xx600 and xx643; xx610 and xx620 required for traffic generation; Fax emulation supported (Optional - Refer XXXFT0);
XX696	MAPS – SS7 CAP Emulation (CAMEL App Part)	Customized Application for the Mobile network Enhanced Logic – CAMEL Application Part (CAP); includes xx600 and xx643
<b><i>Echo Canceller Testing Software Options</i></b>		
XX062	Echo Path Delay / Loss Simulation Software	Simulate Echo Path Delay and Loss w/GLCView , includes PKB070
XX063	Echo Path Delay / Loss Measurement Software	Measures Echo Path Delay and Loss
XX065	G.168 Test Suite for T1 & E1 Echo Cancellers (Manual Testing Software and Procedures)	Specialized procedures, test software, and test files for manual Echo Canceller Testing per CCITT G.168. w/ GLC View, Includes xx020, xx062, xx063, xx066, and PKB070
XX066	Digital Echo Canceller	A multi-channel digital echo canceller; view impulse response, ERL, delay, etc.
EMU037	Echo Measurement Utility	Analyzes echo return loss (ERL) and echo path delay (EPD) for 2Wire Analog, VoIP, T1 E1, and Mobile networks; PKB070 is included
PKB070	Audio Processing Utility	Adds noise, creates line or acoustic echo, analyzes speech level and other useful functions; included with XX062, XX065, EMU037, PKB105, PKB081, PKB067, PKB080, and VBA032
XX067	Automated Echo Canceller Testing	Fully Automated Echo Canceller Testing per G.168 with optional Voice Quality Testing Software – includes xx019 Tx/Rx Utility Software or xx600, xx610, and xx630 w/dongle
PKB080	Automated Echo Canceller Testing TDM-VoIP	See Packet Products Price List
PKB081	Automated <b>Acoustic</b> Echo Canceller Compliance Testing (Partial Tests)	Fully Automated AEC Compliance Testing per G.167 and P.340 for combined TDM –TDM and TDM-VoIP Interfaces, includes xx600, xx610, xx630, xx631; may require PKB100, PKB110, and Level Adjustment Unit ; xx062 and xx020 recommended

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AEC001	AutoECTest Viewer	Offline viewing of AutoECTest Files / Results
XX068	Semi-Automated and Scripted Echo Cancellor Testing Suite w/ C++ Client	Uses Windows Client Server Software (includes xx600, xx610, xx630) with Customizable Scripts for EC G.168 Testing; w/dongle - available with C++ Client
<b><i>Protocol Analyzers and Emulators</i></b>		
XX089	Protocol Identifier	Identifies protocols within T1 E1 whether the bandwidth occupied is full, fractional, timeslot, or sub-timeslot new product
XX090	T1 or E1 Real-Time HDLC Decode / Store / Impair Software	Decode, Capture, Impair HDLC frames from DSO timeslots
OLV090	Offline/ Remote HDLC Analyzer	Decode and Analyze pre-captured HDLC files Remote Protocol Analyzer (includes WCS xx600, requires xx640) , Note 2
XX092	CAS (Channel Associated Signaling) Analyzer	Channel Associated Signaling Analyzer – includes xx600, xx610, xx620, and xx630; performs R1, MFC-R2, and other CAS Signaling Analysis
OLV092	Offline CAS Analyzer	Offline CAS Analyzer
XX095	E1 Real-Time SA Bit HDLC Analysis	Tx / Capture HDLC frames from SA bits TS0
OLV095	Offline SA Bit HDLC Analyzer	Decode/Analyze pre-captured SA Bit HDLC files, Note 2
XX100	T1 or E1 Real-Time ISDN Protocol Analyzer	Real-Time Monitoring of ISDN D-Channel
OLV100	Offline / Remote ISDN Analyzer	Decode / Analyze pre-captured ISDN files Remote Protocol Analyzer (includes WCS xx600, requires xx640), Note 2
XX102	T1 Real-Time DDS Protocol Analyzer	Real-Time Monitoring / Capture of DDS Channels within T1 Lines – supports 9.6, 4.8, 2.4 kbps channels in DS0-A and DS0-B formats
XX105	T1 or E1 Real-Time ISDN Protocol Emulator	Place / Answer calls using all flavors of ISDN
XX110	E1 Real-Time V5.x Protocol Analyzer	Real-Time Monitoring of V5.X Protocol
OLV110	Offline / Remote V5.x Analyzer	Decode / Analyze pre-captured V5.X files Remote Protocol Analyzer (includes WCS xx600, requires xx640), Note 2
XX120	T1 or E1 Real-Time SS7 Protocol Analyzer	SS7 Protocol Analysis (MTP, ISUP, TCAP, SCCP, INAP, IS-41, TUP, CAMEL, CAP)
OLV120	Offline / Remote SS7 Analyzer	Decode / Analyze pre-captured SS7 files Remote Protocol Analyzer (includes WCS xx600, requires xx640), Note 2

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XX130	T1 or E1 Real-Time Frame Relay Analyzer	Real-Time Frame Relay Analysis
OLV130	Offline / Remote Frame Relay Analyzer	Decode / Analyze pre-captured Frame Relay files Remote Protocol Analyzer (includes WCS xx600, requires xx640), Note 2
XX135	PPP and ML-PPP Analyzer	Analysis and Decode of ML-PPP and PPP protocols and other higher layer IP protocols
XX136	PPP and ML-PPP Packet Analysis	Realtime Packet Voice, Video, and Fax Analysis – includes SIGTRAN, PacketScan functions - but not specialized codecs; requires xx135, to Telchemy
OLV135	Offline PPP and ML-PPP Analyzer	Decode / Analyze pre-captured ML-PPP and PPP files, Note 2
OLV136	Offline PPP and ML-PPP Packet Analysis	Offline Packet Voice, Video, and Fax Analysis - includes SIGTRAN, PacketScan functions - but not specialized codecs, to Telchemy
XX140	T1 or E1 Real-Time GR303 Protocol Analyzer	GR303 Analysis (TMC, EOC, CSC)
OLV140	Offline / Remote GR303 Analyzer	Decode / Analyze pre-captured GR303 files, Remote Protocol Analyzer (includes WCS xx600, requires xx640), Note 2
XX142	CDMA2000 Protocol Analyzer	Provides decode of A interfaces in CDMA2000 networks
OLV142	Offline CDMA2000 Protocol Analyzer	Decode / Analyze pre-captured CDMA2000 files, Note 2
XX150 XX151	T1 E1 Real-Time GSM Protocol Analyzer GSM Motorola Mobis Option	GSM Protocol Analysis – all layers with Motorola Mobis decodes, requires xx150
OLV150 OLV151	Offline GSM Analyzer with Motorola Mobis decodes	Decode/Analyze pre-captured GSM files, Note 2 with Motorola Mobis decodes, requires OLV150
XX153	T1 E1 Real-Time TRAU Protocol Analyzer	TRAU Protocol Analyzer w/ PDA for Voiceband Analysis TRAU Playback of captured TRAU files TRAU Toolbox – Emulate Tx/Rx TRAU
OLV153	Offline TRAU Protocol Analyzer	Decode / Analyze pre-captured files, Note 2
XX155 OLV155	T1 or E1 Real-Time GPRS Protocol Analyzer Offline GPRS Analyzer	Gn-Interface & Gb-Interface Decode/Analyze pre-captured GPRS files, Note 2
XX160 OLV160	T1 or E1 Real-Time ATM Analyzer Offline ATM Analyzer	ATM Analysis on T1 / E1 lines Decode/Analyze pre-captured ATM files, Note 2
XX162	ATM BERT	ATM Bit Error Rate Testing over virtual circuits (not supported by Octal Cards)
XX165 OLV165	UMTS Analyzer Offline UMTS Analyzer	Analysis / Decode of broadband wireless protocols Decode/Analyze pre-captured UMTS files, Note 2

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	<b><i>Network Monitoring Software Options</i></b>	
PKV170	Network Surveillance Base Software (Perpetual License, Unlimited Users/Nodes) – Includes Standard Server-Grade Computing Platform	Centralized Database Engine and Client – works with Protocol Analyzers, includes Oracle 11g Standard Edition One and Standard Server-Grade Computing Platform; requires the following respective modules based on the protocol selection
PKV175	T1 E1 Physical Line Monitoring Option for Network Surveillance	Provides T1 E1 Physical Layer Status with Network Surveillance Solution - requires PKV170
PKV172	ISDN Call Detail Record (CDR) Option for Network Surveillance	Provides ISDN CDR option for Network Surveillance Base Software - requires PKV170 and OLV100
OLV100	Offline / Remote ISDN Analyzer	Decode / Analyze ISDN option for Network Surveillance Base Software - requires PKV170 and PKV172
PKV173	SS7/SIGTRAN Call Detail Record (CDR) Option for Network Surveillance	Provides SS7 (ISUP and MAP) /SIGTRAN CDR option for Network Surveillance Base Software - requires PKV170 and OLV120 for SS7; requires PKV170 and PKV106 for SIGTRAN
OLV120	Offline / Remote SS7 Analyzer	Decode / Analyze SS7 option for Network Surveillance Base Software - requires PKV170 and PKV173
PKV106	Offline / Remote SIGTRAN Analyzer	Decode / Analyze SIGTRAN option for Network Surveillance Base Software - requires PKV170 and PKV173
PKV092	CAS Call Detail Records (CDR) Option for Network Surveillance	Provides CAS CDR option for Network Surveillance Base Software – requires PKV170 and OLV092
OLV092	Offline/Remote CAS Analyzer	Decode/Analyze CAS Option for Network Surveillance Base Software – requires PKV170 and PKV092
PKV174	GSM (TDM or IP) & TRAU Call Detail Record (CDR) Option for Network Surveillance	Provides GSM (TDM and IP) & TRAU (TDM) CDR option for Network Surveillance Base Software - requires PKV170 and OLV150 for GSM; requires PKV170 and OLV153 for TRAU
OLV150	Offline / Remote GSM Analyzer	Decode / Analyze GSM option for Network Surveillance Base Software - requires PKV170 and PKV174
OLV153	Offline / Remote TRAU Analyzer	Decode / Analyze TRAU option for Network Surveillance Base Software - requires PKV170 and PKV174
PKV176	Provides VoIP Protocol (SIP, MGCP, Megaco etc.) CDR option for Network Surveillance Base Software	Requires SIP, Megaco, MGCP, H323, RTP Specific Software at Probe Level; requires PKV170 and PKV101
PKV101	Offline / Remote PacketScan Analyzer	Requires SIP, Megaco, MGCP, H323, RTP Protocol Decodes at Central Site (w/ dongle) - requires PKV170 and PKV176
PKV177	Provides UMTS Protocol (luCS and luPS) CDR	Requires UMTS luCS, UMTS luPS Specific Software

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PKV109	option for Network Surveillance Base Software Offline IP Based GSM and UMTS Analyzer (Optional with PacketScan™)	at Probe Level; requires PKV170 and PKV109  Decode / Analyze UMTS option for Network Surveillance Base Software - requires PKV170 and PKV177
PKV178	Provides LTE Protocol CDR option for Network Surveillance Base Software	Requires LTE Specific Software at Probe Level; requires PKV170 and PKV108
PKV108	Offline LTE (Long Term Evolution) Analyzer (Optional with PacketScan™)	Decode / Analyze LTE option for Network Surveillance Base Software - requires PKV170 and PKV178
PKV171	Network Surveillance Agent Toolkit	Documentation, sample code (C++), and technical support for real-time connection to probes
<b><i>DCME Related Software Options</i></b>		
DC007 DC008	DCME Test & Analysis Software w/ Desktop PC DCME Test & Analysis Software w/ Portable PC	See Separate Product Literature See Separate Product Literature
<b><i>Fax &amp; Modem Analysis &amp; Emulation Software Options</i></b>		
XXXFT0	Fax Emulation	Fax Emulation for T1 E1 and Analog Interfaces (FXO and FXS), includes xx600, requires one of the licenses below:
XXXFT2	Fax Port Licenses	2 Fax ports,
XXXFT3	Fax Port Licenses	8 Fax ports,
XXXFT4	Fax Port Licenses	30 Fax ports,
XXXFT5	Fax Port Licenses	60 Fax ports,
XXXFT6	Fax Port Licenses	120 Fax ports,
FXT001 FXT002	GL Insight - Single Fax Analysis – TDM GL Insight - Single Fax Analysis – IP	Offline fax protocol and image analysis of captured PCM files w/dongle
MDT001 MDT002	GL Insight - Single Modem Analysis – TDM GL Insight - Single Modem Analysis - IP	Offline modem protocol and data analysis of captured PCM files w/dongle
VBA038	Fax Demodulator / Decoder	Demodulates Voiceband Fax Signals (PCM) & then Decodes T.30 Fax Images; Works with captured full duplex and 2wire Fax signals; works with VBA or independently of VBA (on DOS command line),
VQT035	FXO RJ11 Hardware Tap / 2-Wire Capture Software	Used for capturing Audio files from RJ11 connections for GL Insight Fax / Modem Analysis; requires Dual UTA or USB T1 E1 Analyzer; includes FXO RJ11 Hardware Tap
PKV104	FaxDDT38	Decodes Fax Images from PCAP files; Works with PacketScan™ or independently of PacketScan™ (on DOS Command Line); Also works with PacketScan™ Offline,

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*Prices are subject to change*

# *GL Communications Inc.*

## **T1 / E1 Analysis Emulation Products Price List**

Revised: Sep 21, 2017

<b>Miscellaneous Software Options</b>		
STE040	Mux / Demux Software	Processing Software for T1/E1 Tx / Rx Files – requires dongle; included with xx020 Record / Playback Software
STE050	Sample Traffic Files	Voice, fax, data, and tone testing of networks; included with basic software
<b>Repeaters, Switches, &amp; Wireless Equipment</b>		
MPT00	T1 Multiport Repeater	1:12 T1 Repetition
MPE00	E1 Multiport Repeater	1:12 E1 Repetition
DPT00	Dual T1 Multiport Repeater	2X 1:4 T1 Repetition
DPE00	Dual E1 Multiport Repeater	2X 1:4 E1 Repetition
SWT001	T1 / E1 / J1 Monitor / Intrusive Switch	8 Port Monitor / Intrusive Failsafe Switch
SME063 SME063d	STM 1 Multiplexer / Demultiplexer w/ 1:1 Fiber Protection	Multiplexes and demultiplexes 63 E1s into / from an STM 1; optional 1:1 Fiber Protection
SME063y	Special Dual E1 Y Cable	Dual E1 Y Cable; Pinout E1#1, 8-2, 7-1, 6-5, 5-4, E1#2, 4-2, 3-1, 2-5, 1-4 – At least one required, up to 36 may be required; not included with SME063 or SME063d
SME063sc	Duplex SC to SC Single Mode 1310 nm	Duplex SC to SC Single Mode 1310 nm – 2 meters – At least one required
BTS001	Small BTS GSM Cell	BTS with Abis over IP; up to 8 Tx/Rx channels
BTS010	w/ GSM – R Option	Optional GSM – R Features
BSC010	BSC / MSC GSM – R Option	Optional GSM – R Features for BSC and MSC

**Note 1: Volume Discount of 15% Available for single purchases of 11 or more Cards or Analyzer units**

**Note 2: All Offline and Remote Analyzers require a dongle and are independent of hardware or T1 E1 type**

**Note 3: Example – 16 TS of SS7 signaling links = 1 X “xx120”, 32 TS of SS7 signaling links = 2 X “xx120”, etc.**

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