

# *GL Communications Inc.*

## T3 / E3 / OC3/12 / STM1/4 Analysis Products Price List

Revised: March 21, 2018

Part Number	Description	Notes
<b><i>OC3/12 STM1/4 Analysis and Emulation Related Hardware &amp; Software</i></b>		
LTS100 LTS105	Lightspeed1000™ - Dual OC3/12 STM1/4 PCIe Card Lightspeed1000™ - Portable Dual OC3/12 STM1/4 USB Unit ( <b>Price Reduction</b> )	PCIe Card or Portable USB Unit with Quad Interfaces: 2 - OC3 / OC12 / STM1 / STM4, 2 - GigE, and a single USB 2.0; <b>requires</b> LTS200 or LTS201, or LTS300 or LTS301, LTS501 or LTS502; includes 2 SM SFPs
LTE001 LTT001	E1 Personality for Channelized T1 Personality for Channelized	E1 Personality for n x 16 E1 Channels T1 Personality for n x 16 T1 Channels
LTS102 LTS103	Hardware Warranty Software Support	Extended 1yr Hardware Warranty Extended 1yr Software Upgrades and Support
LTS111	API Software Toolkit for Custom Development ( <b>Linux</b> )	Develop Custom Applications for OC3/12 STM1/4 Cards for Linux; Requires C++ dev skills
<b><i>UnChannelized Analysis and Emulation Software Applications</i></b>		
LTS200 LTS201	OC3 / STM1 ATM Monitor, BERT, Tx/Rx Test OC3 / STM1 PoS Monitor, BERT, Tx/Rx Test	Basic ATM Monitoring, Test, and BERT Basic PoS Monitoring, Test, and BERT
LTS300 LTS301	OC12 / STM4 ATM Monitor, BERT, Tx/Rx Test OC12 / STM4 PoS Monitor, BERT, Tx/Rx Test	Basic ATM Monitoring, Test, and BERT Basic PoS Monitoring, Test, and BERT
LTS202	Record Playback for OC3 / STM1 ATM	Wirespeed capture and playback to / from hard disk w/ time-stamping; STS-3C/VC-4
LTS203	Record Playback for OC3 / STM1 PoS	Wirespeed capture and playback to / from hard disk w/ time-stamping; STS-3C/VC-4
LTS204 LTS205 LTS215	Protocol Analysis for OC3 / STM1 ATM Protocol Analysis for OC3 / STM1 PoS Packet Data Analysis (PDA) for PoS	AAL2, AAL5 Protocol Analysis PoS Protocol Analysis Packet Data Analysis (PDA) for PoS
LTS206 LTS216	Protocol Analysis for OC3 / STM1 UMTS Packet Data Analysis (PDA) for UMTS	UMTS Protocol Analysis; requires LTS200 IuCs Call Analysis for UMTS, also called PDA
LTS214	OC3 / STM1 SSCOP Server	SSCOP Server Emulates ATM Layer 2 and Adaptation Layer (AAL2/5) Services – used with MAPS -IuCs
LTS217	OC3 / STM1 AAL2 Traffic Core	Traffic Simulation over AAL2 using various codecs, ability to Tx Rx voice files, tones, digits, etc, can be used with LTS220, requires additional codec licenses
LTS220	OC3 / STM1 MAPS UMTS IuCS over ATM	IuCS Interface Emulation over ATM, simulates RNC and MSC, requires LTS214
LTS207 LTS208	Delay Emulation for OC3 / STM1 PoS payloads Delay Emulation for OC3 / STM1 ATM payloads	Delay Emulation for PoS from 1 ms to 500 ms Delay Emulation for ATM from 1 ms to 500 ms
LTS302	Record Playback for OC12 / STM4 ATM	Wirespeed capture and playback to / from hard disk w/ time-stamping;

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LTS303	Record Playback for OC12 / STM4 PoS	STS-12C/VC-4-4C Wirespeed capture and playback to / from hard disk w/ time-stamping; STS-12C/VC-4-4C
LTS304 LTS305 LTS315	Protocol Analysis for OC12 / STM4 ATM Protocol Analysis for OC12 / STM4 PoS Packet Data Analysis (PDA) for PoS	AAL2, AAL5 Protocol Analysis PoS Protocol Analysis Packet Data Analysis (PDA) for PoS
LTS306 LTS316	Protocol Analysis for OC12 / STM4 UMTS Packet Data Analysis (PDA) for UMTS	UMTS Protocol Analysis; requires LTS300 luCs Call Analysis for UMTS, also called PDA
LTS314	OC12 / STM4 SSCOP Server	SSCOP Server Emulates ATM Layer 2 and Adaptation Layer (AAL2/5) Services – used with MAPS -luCs
LTS317	OC12 / STM4 AAL2 Traffic Core	Traffic Simulation over AAL2 using various codecs, ability to Tx Rx voice files, tones, digits, etc, can be used with LTS320, requires additional codec licenses
LTS320	OC12 / STM4 MAPS UMTS luCS over ATM	luCS Interface Emulation over ATM, simulates RNC and MSC, requires LTS314
LTS307 LTS308	Delay Emulation for OC12 / STM4 PoS payloads Delay Emulation for OC12 / STM4 ATM payloads	Delay Emulation for PoS from 1 ms to 500 ms Delay Emulation for ATM from 1 ms to 500 ms
<b>Channelized Analysis and Emulation Software Applications</b>		
LTS501 LTS502	The following are only available for PCIe version of Lightspeed 1000 OC3 / STM1 RAW OC12 / STM4 RAW	<b>Ports = Duplex for Analysis, Simplex for Emulation</b>  Rx/Tx RAW – Channelized / Unchannelized Rx/Tx RAW – Channelized / Unchannelized
LTS503 LTS504	Record Playback for OC3 / STM1 RAW Record Playback for OC12 / STM4 RAW	Wirespeed capture and playback to / from hard disk w/ time-stamping Wirespeed capture and playback to / from hard disk w/ time-stamping
LTS108 LTS116 LTS124 LTS164 LTS464	Any 16 Ports Chan Lic for OC3/12 , STM1/4 Any 32 Ports Channelized Lic for OC3/12, STM1/4 Any 48 Ports Channelized Lic for OC3/12, STM1/4 All Ports Channelized Licenses for OC3, STM1 All Ports Channelized Licenses OC12, STM4	Any 16 Ports Chan Lic for OC3/12, STM1/4, n=1 Any 32 Ports Chan Lic for OC3/12, STM1/4, n=2 Any 48 Ports Chan Lic for OC3/12, STM1/4, n=3 All Ports Chan Lic (84x2 for T1, 63x2 for E1), n=5 All Ports Chan Lic (84x4 for T1, 63x4 for E1) (n = 6)
LTEXXX LTTXXX	Channelized Options for E1 Channelized Options for T1	Channelized Options for E1 (ISDN, SS7, HDLC) Channelized Options for T1 (ISDN, SS7, HDLC) See T1 E1 Price List for Channelized Options
<b>OC3/12 STM1/4 Related Accessories and Cables</b>		
LTS400 LTS401 LTS402	512 MB Memory 1 GB Memory 2 GB Memory	Onboard memory Onboard memory Onboard memory
IPN1310a	SFP Transceiver for OC-3/STM-1 and OC-12/STM-4 Optical, LC, Single-Mode, 1310nm	Generic SFP for Optical, Duplex LC Connector SM, 1310nm, IR (Intermediate Range, 15 km)

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IPN850a	SFP Transceiver for OC-3/STM-1 and OC-12/STM-4 Optical, LC, Multi-Mode, 850 nm or 1310 nm	NEEDS UPDATE – Do Not Quote - Generic SFP for Optical, Duplex LC Connector, MM, 850 nm or 1310 nm, SR (Short Range, 550m)
SA019a	Fiber Optic Cable, Single-Mode, Duplex LC to LC, 2m	2m FO Jumper, 9/125 SM, Ø2mm
SA019b	Fiber Optic Cable, Single-Mode, Duplex LC to SC, 2m	2m FO Jumper, 9/125 SM, Ø2mm
SA019c	Fiber Optic Cable, Multi-Mode, Duplex LC to LC, 2m	2m FO Jumper, 50/125 MM, OM3 (10G), Ø2mm
SA019d	Fiber Optic Cable, Multi-Mode, Duplex LC to SC, 2m	2m FO Jumper, 50/125 MM, OM3 (10G), Ø2mm
SA019st	Fiber Optic T-tap, Duplex LC, Single-Mode	Fiber Optic T-tap for Non-Intrusive Monitoring, Duplex LC Connectors, 9/125 SM, 70/30 split, includes one SA019a; requires one SA019sc
SA019sc	Fiber Optic Analyzer Cable, Single-Mode, Duplex LC to Dual Duplex LC, 3m	3m FO Jumper, 9/125 SM, Duplex LC-Dual Duplex LC, Ø3mm, Special Analyzer Cable for use with SA019st
SA019mt	Fiber Optic T-tap, Duplex LC, Multi-Mode	Fiber Optic T-tap for Non-Intrusive Monitoring, Duplex LC Connectors, 50/125 MM, 70/30 split, includes one SA019c; requires one SA019mc
SA019mc	Fiber Optic Analyzer Cable, Multi-Mode, Duplex LC to Dual Duplex LC, 3m	3m FO Jumper, 50/125 MM, Duplex LC-Dual Duplex LC, Ø3mm, Special Analyzer Cable for use with SA019mt
SA019ska	<b>OC3/12, STM1/4</b> Fiber Optic Single-Mode T-tap Kit with Required Cables and SFP Transceivers	Kit Includes: (1) SA019st, (1) SA019sc, (2) IPN1310a, (2) SA019a, (2) SA019b
SA019mka	<b>OC3/12, STM1/4</b> Fiber Optic Multi-Mode T-tap Kit with Required Cables and SFP Transceivers	Kit Includes: (1) SA019mt, (1) SA019mc, (2) IPN850a, (2) SA019c, (2) SA019d
MT001	mTOP 1U Rack Mount Enclosure w/SBC	1U 19" Rack Mount Enclosure w/Rails, Multiple Interface TDM/Optical/Packet w/Single Board Computer (SBC) (Specs: 240 GB SSD, 8GB RAM, i3 Equivalent, Win 10/64), USB 3.0 Hub, ATX Power Supply, Can house any combination of three (3) USB based units - PacketExperts, tProbes, Dual UTAs, and LightSpeeds
MT002	mTOP 1U Rack Mount Enclosure w/o SBC	w/o SBC, but for use with MT001 for Daisy Chain or other Rack PCs
MT003	mTOP 2U Rack Mount Enclosure w/SBC	2U 19" Rack Mount Enclosure w/Rails, Multiple Interface TDM/Optical/Packet w/Single Board Computer (SBC) (Specs: 240 GB SSD, 8GB RAM, i3 Equivalent, Win 10/64), USB 3.0 Hub, ATX Power Supply, Can house any combination of three (3) USB based units - PacketExperts, tProbes, Dual UTAs, T3/E3 units and LightSpeeds
MT004	mTOP 2U Rack Mount Enclosure w/o SBC	w/o SBC, but for use with MT003 for Daisy Chain or other Rack PCs
<b>USB Based T3/E3 Analysis Related Hardware &amp; Software</b>		
TE3001	Dual T3 E3 / T1 E1 Hardware USB Base Unit ( <b>Price Reduction</b> )	Portable USB Unit – Requires TT3001 or EE3001
TE3005	Rack Enclosure for T3/E3 System – up to 6 T3/E3s	2U - 19" Rack Enclosure, Power Supply, Fans, 4 Port USB Hub, Cables and Accessories, Accommodates three (3) Dual T3/E3 USB Units, Requires TT3001 or EE3001
TT3001	T3 / T1 / E1 Analyzer Basic Software	w/ Basic Software for WIN 7/10

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EE3001 TE3002 TE3003	E3 / E1 Analyzer Basic Software T3 E3 Hardware Warranty T3 E3 Hardware and Software Support	w/ Basic Software for WIN 7/10 N/A T3 E3 USB Extended 1 yr. Software and Hardware Warranty and Support – 10% of total system price
TT3020 EE3020	T3 Record Playback Software (GUI) E3 Record Playback Software (GUI)	File Record / Send over T3 – framed & unframed File Record / Send over E3 – framed & unframed
TT3090 EE3090	T3 HDLC Tx/Rx Test + Analyzer (GUI) E3 HDLC Tx/Rx Test + Analyzer (GUI)	Send Receive Analyze HDLC over T3 Send Receive Analyze HDLC over E3
TT3135 EE3135	T3 PPP Analyzer (GUI) E3 PPP Analyzer (GUI)	Analysis and decode of ML-PPP and PPP over T3 Analysis and decode of ML-PPP and PPP over E3
TT3130 EE3130	T3 Frame Relay Analyzer (GUI) E3 Frame Relay Analyzer (GUI)	Analysis and decode of Frame Relay over T3 Analysis and decode of Frame Relay over E3
TT3160	T3 ATM Analyzer (GUI)	Analysis and decode of ATM cells over T3
TT3200 TTT001 TTTxxx	Channelized T3 License for T1 Soft T1 Analyzer Application Channelized Options for T1	Direct T1 Analysis for up to 28 T1s from T3 Required and Included Channelized Options for T1 – see T1 E1 Price List
TT3210 EEE001 EEExxx	Channelized T3 License for E1 Soft E1 Analyzer Application Channelized Options for E1	Direct E1 Analysis for up to for up to 21 E1s from T3 Required and Included Channelized Options for E1 – see T1 E1 Price List
EE3200 EEE001 EEExxx	Channelized E3 License for E1 Soft E1 Analyzer Application Channelized Options for E1	Direct E1 Analysis for up 16 E1s from an E3 Required and Included Channelized Options for E1 – see T1 E1 Price List
TT3600 EE3600	T3 Basic Client Server Scripted Control Software E3 Basic Client Server Scripted Control Software	Precise & Sequential Control of T3 Analyzer via Client Server – Uses TCP/IP Precise & Sequential Control of E3 Analyzer via Client Server – Uses TCP/IP
TT3610 EE3610	T3 Client Server Tx/Rx File E3 Client Server Tx/Rx File	Tx / Rx Files on Unframed or Unchannelized T3 Tx / Rx Files on Unframed or Unchannelized E3
TT3634 EE3634	T3 Client Server High Throughput HDLC Tx/Rx Test E3 Client Server High Throughput HDLC Tx/Rx Test	HDLC Simulation with Impairments HDLC Simulation with Impairments
TT3635 EE3635	T3 Client Server High Throughput PPP Tx/Rx Test E3 Client Server High Throughput PPP Tx/Rx Test	PPP Emulation, requires TT3634 PPP Emulation, requires EE3634
SA004A	T3 E3 Accessory Kit	Four SA007o BNC-to-BNC Cables (75 Ohm), Two SA017B RJ48C to RJ48C Crossover Cables, and Two T-taps with Attenuator

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<b>PCI Based Ultra T3 Related Hardware &amp; Software</b>		
UT301 / UT302  SA000d  UT3001  UT3002  UT3003 UT3008 UT3009	T3 Analysis Card – with T1 or E1 Interface  High Stability Internal Clock Option  FEAC Transmit / Receive  Maintenance Facility Data Link  API Development Toolkit T3 Hardware Warranty T3 Software Support	T3 Analysis Card w/ Basic Software and Client / Server and Command Line Utility,  +/- 1 ppm Internal Clock  Optional Software for T3 Card  Optional Software for T3 Card  API Development Toolkit T3 Card extended 1 yr. hardware warranty T3 Card extended 1 yr. software upgrades and support
<b>PCI Based OC-3/STM-1 Analysis Related Hardware &amp; Software</b>		This product line is obsolete – Instead Use OC-3 or STM-1 Mux / DeMux with T1 E1 Platforms to achieve same functionality
<b>UT401</b>  <b>UT4010</b>  <b>UT4011</b>  <b>UT4020</b>  <b>UT402</b> <b>UT403</b>  <b>UT4021</b>	<b>OC-3/STM-1 Analysis Card</b>  <b>OC-3, STS-1, T3, T1, E1 SONET Analysis Software</b>  <b>Windows Client/Server Scripted Control SW</b>  <b>STM-1, STM-0, T3, T1, E1 SDH Analysis Software</b>  <b>OC3 STM1 Hardware Warranty</b> <b>OC3 STM1 Software Support</b>  <b>Windows Client/Server Scripted Control SW</b>	Requires UT4010 and/or UT4020 for each card; other special apps licensed per system  Breakout any Signal from OC-3, STS-1, T3, T1, or E1 Interfaces  Precise & Sequential Control of OC-3 Card over TCP/IP (SONET Version)  Breakout any Signal from STM-1, STM-0, T3, T1, or E1 Interfaces  OC3 STM1 Hardware Warranty OC3 STM1 Extended 1 yr. Software Upgrades and Support  Precise & Sequential Control of OC-3 Card over TCP/IP (SDH Version)

**Note 1: Volume Discount of 15% available for single purchase of 11 or more cards or Analyzer Units**

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