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

Revised: March 8, 2024

| Part Number | Revised: March 8, Description | Notes |
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| raititampor | OC3/12 STM1/4 Analysis and Emulation Related Hardware & Software - LightSpeed | Notes |
| LTS100 LTS105 | Lightspeed1000 [™] - Dual OC3/12 STM1/4 PCIe Card Lightspeed1000 [™] - Portable Dual OC3/12 STM1/4 USB Unit | PCIe Card or Portable USB Unit with Quad Interfaces: 2 - OC3 / OC12 / STM1 / STM4, 2 - GigE, and a single USB 2.0; requires LTS200 or LTS201, or LTS300 or LTS301, or LTS501 or LTS502; |
| | UnChannelized Analysis and Emulation Software Applications - LightSpeed | |
| 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 |
| LTS202 | Record Playback for OC3/STM1 ATM | Wirespeed capture and playback to / from hard disk w/ time- |
| LTS203 | Record Playback for OC3/STM1 PoS | stamping; STS-3C/VC-4 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 luCs 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 -luCs |
| 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 luCS over ATM | luCS Interface Emulation over ATM, simulates RNC and MSC, requires LTS214 |
| LTS207 LTS208 | Delay Emulaton 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 |
| LTS209 | SONET / Ethernet Converter | Converts ATM within SONET to ATM within Ethernet and vice versa; includes LTS115, LTS200, LTS202, SA005lts 1 RU mTOP enclosure for LightSpeed1000 with Windows 10/64 & TPM 2.0 chip, Intel NUC, 8GB RAM, USB 3.0 Hub, 240 GB SSD, custom software - TBD |
| LTS300 LTS301 | OC3/STM1/OC12/STM4 ATM Monitor, BERT, Tx/Rx Test OC3/STM1/OC12/STM4 PoS Monitor, BERT, Tx/Rx Test | Basic ATM Monitoring, Test, and BERT, includes OC3/STM1 Basic PoS Monitoring, Test, and BERT, includes OC3/STM1 |
| LTS302 | Record Playback for OC3/STM1/OC12/STM4 ATM | Wirespeed capture and playback to / from hard disk w/ time- |
| LTS303 | Record Playback for OC3/STM1/OC12/STM4 PoS | stamping; STS-12C/VC-4-4C and STS-3C/VC-4 Wirespeed capture and playback to / from hard disk w/ time- stamping; STS-12C/VC-4-4C and STS-3C/VC-4 |

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| LTS304 | Protocol Analysis for OC3/STM1/OC12/STM4 ATM | AAL2, AAL5 Protocol Analysis |
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| LTS305 | Protocol Analysis for OC3/STM1/OC12/STM4 PoS | PoS Protocol Analysis |
| LTS315 | Packet Data Analysis (PDA) for PoS | Packet Data Analysis (PDA) for PoS |
| | | |
| LTS306 | Protocol Analysis for OC3/STM1/OC12/STM4 UMTS | UMTS Protocol Analysis; requires LTS300 |
| LTS316 | Packet Data Analysis (PDA) for UMTS | luCs Call Analysis for UMTS, also called PDA |
| LTS314 | OC3/STM1/OC12/STM4 SSCOP Server | SSCOP Server Emulates ATM Layer 2 and Adaptation Layer (AAL2/5) Services – used with MAPS -luCs |
| | | (" == 0) |
| LTS317 | OC3/STM1/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 | OC3/STM1/OC12/STM4 MAPS UMTS luCS over ATM | luCS Interface Emulation over ATM, simulates RNC and MSC, requires LTS314 |
| LTS307 LTS308 | Delay Emulation for OC3/STM1/OC12/STM4 PoS payloads Delay Emulation for OC3/STM1/OC12/STM4 ATM payloads | Delay Emulation for PoS from 1 ms to 500 ms Delay Emulation for ATM from 1 ms to 500 ms |
| | Channelized Analysis and Emulation | |
| | Software Applications - LightSpeed | |
| | The following are only available for PCIe version of Lightspeed 1000 | Ports = Duplex for Analysis, Simplex for Emulation |
| L TE004 | E1 Derechality for Channelized | E4 Dereconsity for Channelized |
| LTE001 LTT001 | E1 Personality for Channelized T1 Personality for Channelized | E1 Personality for Channelized T1 Personality for Channelized |
| LTS501 | OC3/STM1 RAW | Rx/Tx RAW – Channelized / Unchannelized |
| LTS502 | OC3/STM1/OC12/STM4 RAW | Rx/Tx RAW – Channelized / Unchannelized |
| LTS503 | Record Playback for OC3/STM1 RAW | Wirespeed capture and playback to / from hard disk w/ time- |
| LTS504 | Record Playback for OC3/STM1/OC12/STM4 RAW | stamping Wirespeed capture and playback to / from hard disk w/ time- stamping |
| LTS108 | Any 16 Ports Channelized Lic for OC3/12, STM1/4 | Any 16 Ports Chan Lic for OC3/12, STM1/4, n=1 |
| LTS106 LTS116 | Any 32 Ports Channelized Lic for OC3/12, STM1/4 Any 32 Ports Channelized Lic for OC3/12, STM1/4 | Any 32 Ports Chan Lic for OC3/12, STM1/4, n=1 Any 32 Ports Chan Lic for OC3/12, STM1/4, n=2 |
| LTS110 | Any 48 Ports Channelized Lic for OC3/12, STM1/4 | Any 48 Ports Chan Lic for OC3/12, STM1/4, n=3 |
| LTS164 | All Ports Channelized Licenses for OC3, STM1 | All Ports Chan Lic for OC3, STM1 (84x2 for T1, 63x2 for E1), |
| LTS464 | All Ports Channelized Licenses OC12, STM4 | n=3 All Ports Chan Lic for OC12, STM4 (84x4 for T1, 63x4 for E1), n=3 |
| | | |
| LTEXXX | Channelized Options for E1 | Channelized Options for E1 (ISDN, SS7, HDLC) |
| LTTXXX | Channelized Options for T1 | Channelized Options for T1 (ISDN, SS7, HDLC) |
| | | See T1 E1 Price List for Channelized Options |
| LTS111 | API Software Toolkit for Custom Development (Linux) | Develop Custom Applications for OC3/12 STM1/4 Cards for Linux; Requires C++ dev skills |
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| | OC3/12 STM1/4 Related Accessories and Cables – LightSpeed & SonetExpert | |
| 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) |
| 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 SA019b SA019c SA019d | Fiber Optic Cable, Single-Mode, Duplex LC to LC, 2m Fiber Optic Cable, Single-Mode, Duplex LC to SC, 2m Fiber Optic Cable, Multi-Mode, Duplex LC to LC, 2m Fiber Optic Cable, Multi-Mode, Duplex LC to SC, 2m | 2m FO Jumper, 9/125 SM, Ø2mm 2m FO Jumper, 9/125 SM, Ø2mm 2m FO Jumper, 50/125 MM, OM3 (10G), Ø2mm 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 | OC3/12, STM1/4 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 | OC3/12, STM1/4 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 |
| PXN00 | Optical Multiport Tap/Repeater | 1x5 or 2x3 Optical Signal Tap/Repeater; repeats 10/100/1000, 2.5 GigE, OC3/STM1, OC12/STM4, OC48/STM16 optical signals; multirate SFPs and FO cables extra / optional for multimode and/or singlemode; multiple units into MT002 rack enclosure optional |
| PXN01 | Multirate multimode SFPs and FO Cables | Six (6) - 10/100/1000 and 2.5 GigE multimode SFPs and multimode FO cables |
| PXN02 | Multirate singlemode SFPs and FO Cables | Six (6) - 10/100/1000 and 2.5 GigE singlemode SFPs and singlemode FO cables |
| | SonetExpert™(OC-3/STM-1 OC-12/STM-4) Analysis and Emulation Related Hardware & Software | |
| SEU100 | SonetExpert™ - Dual OC3/12 STM1/4 USB Unit | Portable USB Unit with 2 Optical Interfaces for Channelized OC3 / OC12 / STM1 / STM4 applications; |

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| I. | - | |
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| | | single USB 3.0; includes OC3/OC12/STM1/STM4 SFPs (customer preference of MM or SM); requires additional software for Unchannelized (SEU901/SEU902); requires additional software for RAW (SEUE02/SEUT02) and T1 E1 personality (SEE001/SET001); same platform as PXN100 / PXN101 and upgradeable to PacketExpert 10GX for Ethernet functionality |
| SEU110 | SonetExpert™ Upgrade to PXN100 | Upgrades the SonetExpert™ hardware platform to perform PXN100 functions |
| SEU120 | SonetExpert™ Upgrade to PXN101 | Upgrades the SonetExpert™ hardware platform to perform PXN101 functions, requires SEU110 |
| | SonetExpert UnChannelized Analysis and Emulation Software Applications | |
| SEU901 | UnChannelized BERT for OC3 / STM1 and OC12 / STM4 Rates | UnChannelized BERT on OC3 / STM1 and OC12 / STM4 Rates for SEU100 |
| SEU902 | UnChannelized BERT for OC3 / STM1, OC12 / STM4, OC48 / STM16, OC192 / STM64 Rates | UnChannelized BERT on OC3 / STM1, OC12 / STM4, OC48 / STM16, and OC192 / STM64 Rates for SEU100; includes SEU901 |
| SEU300 | OC3/STM1/OC12/STM4 ATM Monitor, BERT, Tx/Rx Test | Basic ATM Monitoring, Test, and BERT |
| SEU301 | OC3/STM1/OC12/STM4 PoS Monitor, BERT, Tx/Rx Test | Basic PoS Monitoring, Test, and BERT |
| SEU302 | Record Playback for OC3/STM1/OC12/STM4 ATM | Wirespeed capture and playback to / from hard disk w/ time-stamping; STS-12C/VC-4-4C and STS-3C/VC-4 |
| SEU303 | Record Playback for OC3/STM1/OC12/STM4 PoS | Wirespeed capture and playback to / from hard disk w/ time-stamping; STS-12C/VC-4-4C and STS-3C/VC-4 |
| SEU304 | Protocol Analysis for OC3/STM1/OC12/STM4 ATM | AAL2, AAL5 Protocol Analysis |
| SEU305 | Protocol Analysis for OC3/STM1/OC12/STM4 PoS | PoS Protocol Analysis |
| SEU503 | Record Playback for OC3/STM1 RAW | Wirespeed capture and playback to/from hard disk w/ time- stamping |
| SEU504 | Record Playback for OC3/STM1/OC12/STM4 RAW | Wirespeed capture and playback to/from hard disk w/ time- stamping |
| SEU315 | Packet Data Analysis (PDA) for PoS | Packet Data Analysis (PDA) for PoS |
| | SonetExpert Channelized Analysis and Emulation Software Applications | |
| | One "channel" is duplex: (one Tx, one Rx), or (two Rx), or (two Tx) | |
| SEUE02 | OC3/STM1 RAW | OC3/STM1 Basic License; permits visibility into all channels |

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| SEUT02 | OC3/OC12 and STM1/STM4 RAW | OC3/STM1 and OC12/STM4 Basic Licenses; permits visibility into all channels |
|---------|---|--|
| | Basic Applications | |
| SEE001 | SonetExpert™ Basic E1 Software | E1 Personality for Channelized; view / test all E1s, DS0s, includes MC-BERT |
| SET001 | SonetExpert™ Basic T1 Software | T1 Personality for Channelized; view / test all T1s, DS0s, includes MC-BERT |
| | Optional Application Licenses | |
| SEU116 | 16 Channels for OC3/STM1 | Any 16 T1 E1 Chan Lic for OC3/STM1 |
| SEU132 | 32 Channels for OC3/STM1 | Any 32 T1 E1 Chan Lic for OC3/STM1 |
| SEU164 | 64 Channels for OC3/STM1 | Any 64 T1 E1 Chan Lic for OC3/STM1 |
| SEU128 | 128 Channels for OC3/STM1 | Any 128 T1 E1 Chan Lic for OC3/STM1 (note, max for E1 is |
| SEU196 | All Channels (168 for T1, 126 for E1) for OC3/STM1 | 126) All (84x2 T1s, 63x2 E1s) Chan Lic for OC3/STM1 |
| CE11446 | 46v4 Channels for OC2/CTM4 and OC42/CTM4 includes | Apy 64 T4 F4 Chap Lie for OC2/OC42/STM4/STM4 |
| SEU416 | 16x4 Channels for OC3/STM1 and OC12/STM4, includes SEU116 | Any 64 T1 E1 Chan Lic for OC3/OC12/STM1/STM4 |
| SEU432 | 32x4 Channels for OC3/STM1 and OC12/STM4, includes SEU132 | Any 128 T1 E1 Chan Lic for OC3/OC12/STM1/STM4 |
| SEU464 | 64x4 Channels for OC3/STM1 and OC12/STM4, includes SEU164 | Any 256 T1 E1 Chan Lic for OC3/OC12/STM1/STM4 |
| SEU428 | 128x4 Channels for OC3/STM1 and OC12/STM4, includes SEU128 | Any 512 T1 E1 Chan Lic for OC3/OC12/STM1/STM4 |
| SEU464 | All Channels (672 for T1, 504 for E1) for OC3/STM1 and OC12/STM4, includes SEU196 | All (84x8 T1s, 63x8 E1s) Chan Lic for OC3/OC12/STM1/STM4 |
| SEEXXX | Channelized Options for E1 in 16 Ch increments | Channelized Options for E1 (16, 32,) |
| SETXXX | Channelized Options for T1 In 16 Ch increments | Channelized Options for T1 (16, 32,) |
| | | See T1 E1 Price List for Channelized Optional Apps |
| 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; Optional VGA to mini DP interface cable |
| MT001E | mTOP with i7 | Same as MT001 but with Intel Core i7; |
| MT002 | mTOP 1U Rack Mount Enclosure w/o SBC | w/o SBC, but for use with MT001 for Daisy Chain or other Rack PCs |
| MT005 | mTOP Probe | Portable stand-alone unit, includes i3 Intel NUC (w 8GB RAM, 256 GB HDD, Win 10/64); packaged in a more compact design with support for a single GL board; Can house any one of the USB based units - PacketExperts, tProbes, Dual UTAs, T3/E3 units and LightSpeeds; Optional VGA to mini DP interface cable. Dimensions: 264mm long, 76.6mm high, and 212.6mm wide |
| MT005E | mTOP Probe with i7 | Same as MT005 but with Intel Core i7; |

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| | USB Based T3/E3 Analysis Related Hardware & Software | |
| TE3001 | Dual T3 E3 / T1 E1 Hardware USB Base Unit (Price Reduction) | Portable USB Unit – Requires TT3001 or EE3001; If supplied with Notebook PC, requires medical power supplies, 9v, 18 watts, 2A, to pass on ground to USB T3 E3. |
| TT3001 EE3001 TE3002 TE3003 | T3 / T1 / E1 Analyzer Basic Software E3 / E1 Analyzer Basic Software T3 E3 Hardware Warranty T3 E3 Hardware and Software Support | w/ Basic Software for WIN 10, 64-bit w/ Basic Software for WIN 10, 64-bit 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 / Emulation 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 / Emulation 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 / Emulation for up 16 E1s from an E3 Required and Included Channelized Options for E1 – see T1 E1 Price List |
| TT3600 | T3 Basic Client Server Scripted Control Software | Precise & Sequential Control of T3 Analyzer via Client Server, includes framed and unframed BERT – Uses TCP/IP |
| EE3600 | E3 Basic Client Server Scripted Control Software | Precise & Sequential Control of T3 Analyzer via Client Server, includes framed and unframed BERT – 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 |
| XX617 | T3 E3 WCS Client Python Module | Permits Python Client development for T3 E3 platforms |

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| SA004A | T3 E3 Accessory Kit | Four SA007p BNC-to-BNC Cables (75 Ohm), Two SA017B RJ48C to RJ48C Crossover Cables, and Two T-taps with 20 dB Attenuator |
|--------|--|--|
| | Network Monitoring Software Options | |
| | Refer NMS section under Packet Series Price List | |