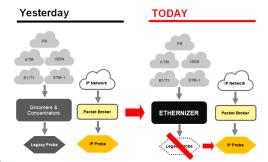
Ethernizer E-313B, E-313B-I TDM to IP Protocol Converter

Technical Data Sheet

Product Description

Telecom Operators are migrating from Legacy network infrastructures to more scalable, flexible and efficient Internet protocol (IP) networks, to support the new IP services. As this migration is not so fast and easy, due to technical and budget constraints, operators are currently handling a mixed architecture TDM & IP, both for links and monitoring probes.

Microtel's Ethernizer enables to monitor the whole infrastructure using IP probes, saving money in future investment and optimizing the whole monitoring system.



Key features

- Convert SS7 Signalling (MTP-2) to SIGTRAN (M2UA or M3UA) Product: E-313B;
- Convert STM-1/ISDN PRI (LAPD- Channel D) to SIGTRAN (IUA) Product: E-313B-I;
- Interface TDM STM-1 links (VC12/E1 HSL&LSL) at physical level;
- Different source/destination IP addresses can be assigned to each SIGTRAN stream (1024 streams for each input module), providing aid to IP probes for SS7 link-sets identification; forwarding the

converted IP packets to 1Gb/s output interfaces, which are directly connected to the IP monitoring tools;

- L2GRE/NVGRE tunnel encapsulation;
- Support Layer 1 and Layer 2 alarms through SNMP traps:
 - * STM-1 LOS (Loss of Signal), LOF (Loss of Frame),
 - VC12/E1 LOF (Loss of Frame), AIS (Alarm Indication Signal) & RAI (Remote Alarm Indication),
 - * SS7 Link Activity Alarm.
 - CLI and GUI available for system configuration, management and alarm status monitoring. Import/export of "csv files" is supported for easy mapping and configura-

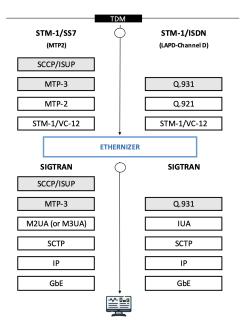
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Highlights

- No need for legacy probes: IP probes can interface TDM links thanks to Ethernizer, which converts SS7 Signaling to SIGTRAN
- No additional IP probes are required: SIGTRAN traffic can be delivered to centralized IP tools, using L2GRE tunnel encapsulation
- Fully compliant with SIGTRAN standard, no need to customize the IP probe,
- All information are captured from the TDM links, layer 1 and layer 2 alarms are available through SNMP traps



Technical Data Sheet



Ethernizer E-313B, E-313B-I — Technical Specification

	Ethernizer E-313B, E-313B-I	
Input/Output Capabilities		
Input modules	1 module, with 4xSTM-1	
Output ports	2x1Gb/s Ethernet ports	
Management		
Management ports	1 x 10/100/1000Mb/s with RJ45 connector	
Protocols	IPV4, SNMPv1, HTTPS	
Statistics and Alarms	Real time statistics and counters available for each input/output port	
Transceiver type		
Copper (SFP)	1000 BASE-T	
Singlemode (SFP/SFP+)	1000 BASE LX (1310nm)	
Multimode	1000 BASE SX (850nm)	

Operating	Power	Dimensions E-313B/B-I
 Operating temperature: 0°C to 45°C Storage temperature: -20°C to 70 °C Relative humidity: up to 90% not condensing 	 220-110 Vac 50-60 Hz Redundant hot swap power modules 48 Vdc hot swap power modules Max consumption: 150 W 	 Chassis 1U surface or 19" rack mount 482,6 mm W, 437 mm D, 44 mm H Weight: (fully equipped) 6 Kg (13.3 lbs)

Microtel Innovation is a Cinetix Group Company

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Ethernizer E-313B, E-313B-I — Ordering Information

E-313B-2AS-2G	Ethernizer 1U, 19" rack mount including: 1 input module with 2 STM-1 singlemode (4rx) Input: 4 SFP on front panel (included) Output: 2x1G Ethernet front ports with SFP cages, these SFP are not included Includes software licence for protocol conversion from SS7/STM-1 to SIGTRAN
E-313B-4AS-2G	Ethernizer 1U, 19" rack mount including: 1 input module with 4 STM-1 singlemode (8rx) Input: 8 SFP on front panel (included) Output: 2x1G Ethernet front ports for with SFP cages, these SFP are not included Includes software licence for protocol conversion from SS7/STM-1 to SIGTRAN
E-313B-I-4AS-2G	Ethernizer 1U, 19" rack mount including: 1 input module with 4 STM-1 singlemode (4rx) Input: 8 SFP on front panel (included) Output: 2x1G Ethernet front ports with SFP cages, these SFP are not included Includes software licence for protocol conversion from ISDN STM-1 (LAPD-Channel D) to SIGTRAN (IUA)
PS1-3/160-AC	Redundant power supply AC
PS1-5/160-DC	Option: unit with redundant power supply DC
E-313B-L2AS	Ethernizer E313B, capacity licence to enable additional 2 STM-1
SFP-GT/J	SFP-GT/J 1000 Base T Copper with RJ-45 connector
SFP-GS/L-24	SFP-GS/L-24 1000 Base SX (850nm) Multimode with LC connector
SFP-GL/L-23	SFP-GL/L-23 1000 Base LX (1310nm) Single Mode with LC connector