

Product Brief: TPoP E1/T1 Smart SFP™ Transparent PDH over Packet

Overview

TPoP (Transparent PDH over Packet) Smart SFP $^{\text{TM}}$ converts E1 or T1 (Also known as DS1) traffic to a packet stream using RFC4553 SAToP TDM over packet pseudowire technology.

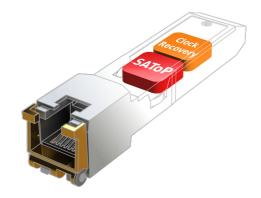
Designed in conformance with the Small Form Factor Pluggable 20-pin Multi-Source Agreement (MSA), TPoP Smart SFP $^{\rm IM}$ can be used in any free SFP slot in a router or a switch to transports PDH traffic across a packet network.

TPoP Smart SFP $^{\text{m}}$ is a plug-and-play device which can be used without any provisioning and simplifies configuration and service turn-up of E1/T1 connections across a packet network.

The integration of TPoP into an SFP greatly reduces system and network complexity, offers lower carbon footprint, and brings CAPEX and OPEX savings.

TPoP capabilities are complemented with a Gigabit Ethernet system interface. It provides a RJ45 interface and is designed to operate at industrial temperature range.

Optionally, an API is available to facilitate integration in existing equipment and management systems. This management interface allows configuration and helps to monitor relevant parameters.



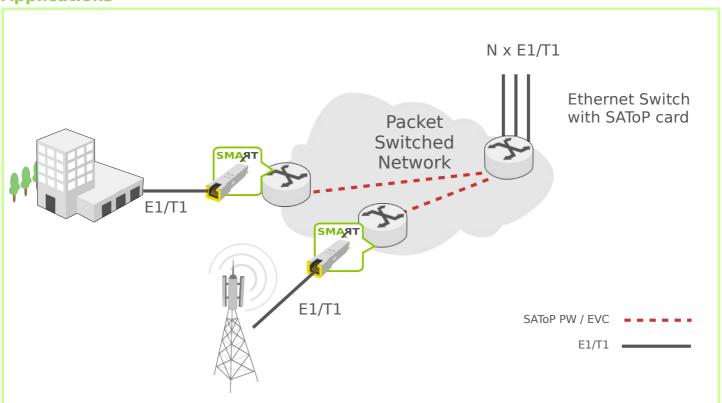
Application Highlights

- TDM over Packet
- Wireless backhaul systems
- Migrate E1/T1 access to packet
- Interop with CSoP Smart SFP™

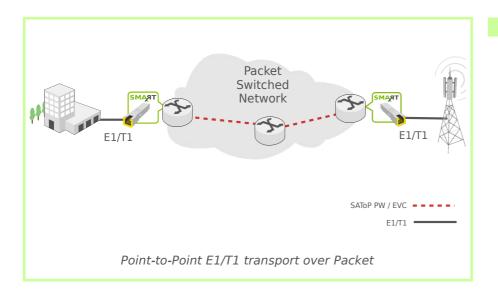
Benefits

- · Compact size
- Industrial temperature range
- Plug-and-play operation
- Low Carbon footprint
- Total cost reduction

Applications



Convert E1/T1 signals to packet with TPoP Smart SFP™ and aggregate with SAToP equipment



Aggregation gateway node: 100s of E1/T1 over packet into E1/T1 over SONET/SDH SONET/SDH Network SMART SMART SMART SMART SWITCH SWITCH SWITCH SWITCH SWITCH SWITCH SWITCH SWART SATOP PW / EVC STM-n / OC-m E1/T1 Aggregation of E1/T1 to SONET/SDH

Features

- SFP INF-8074 compliant¹
- SAToP (RFC4553) packetizer
- Several timing modes
- MEF8 and MPLS Frame header format
- Packetization latency of 1 ms
- Jitter and wander compliant to MEF18, ITU-T G.8261 and G.823/4
- Plug-and-play: no configuration needed
- Software API for remote management (optional)
- Interop with other SAToP E1/T1 equipment, including CSoP Smart SFP™

Interfaces

- E1 2.048 Mb/s 120 Ohm balanced
- T1 1.544 Mb/s 100 Ohm balanced
- Compatible with SFP electrical MSA
- RJ45 connector
- MSA interface supports 1000Base-X SerDes
- Available operating temperature range:
 - Industrial: -40°C to 85°C

Contact Information

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¹ Exception: power consumption exceeds MSA limit