

## Product Brief: CSoP Smart SFP™ Channelized SONET/SDH over Packet

### Overview

CSoP (Channelized SONET/SDH over Packet) Smart SFP™ converts a fully channelized SONET/SDH signal to a packet stream using RFC4553 SAToP TDM over packet pseudowire technology.

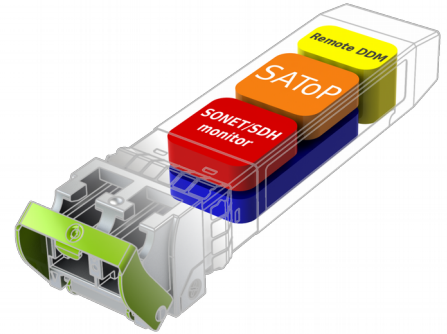
Designed in conformance with the Small Form Factor Pluggable 20-pin Multi-Source Agreement (MSA), CSoP Smart SFP™ can replace an existing SFP in a router or a switch and transport E1/DS1 traffic across a packet network.

CSoP Smart SFP™ aggregates single E1/DS1 or low fill SONET/SDH links and enables each E1 or DS1 channel to be processed individually to provide a high density Gateway between a SONET/SDH network and a TDM over packet ethernet or IP/MPLS network.

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

CSoP capabilities are complemented with a Gigabit Ethernet system interface. The Smart SFP™ serves a wide range of optical and reach applications: OC-3/STM-1 duplex fiber with reaches up to 80 km at industrial temperature range.

Optionally, an API and SNMP MIBs are available to facilitate the integration in existing equipment and management systems. This management interface allows for configuration and monitoring of relevant parameters.



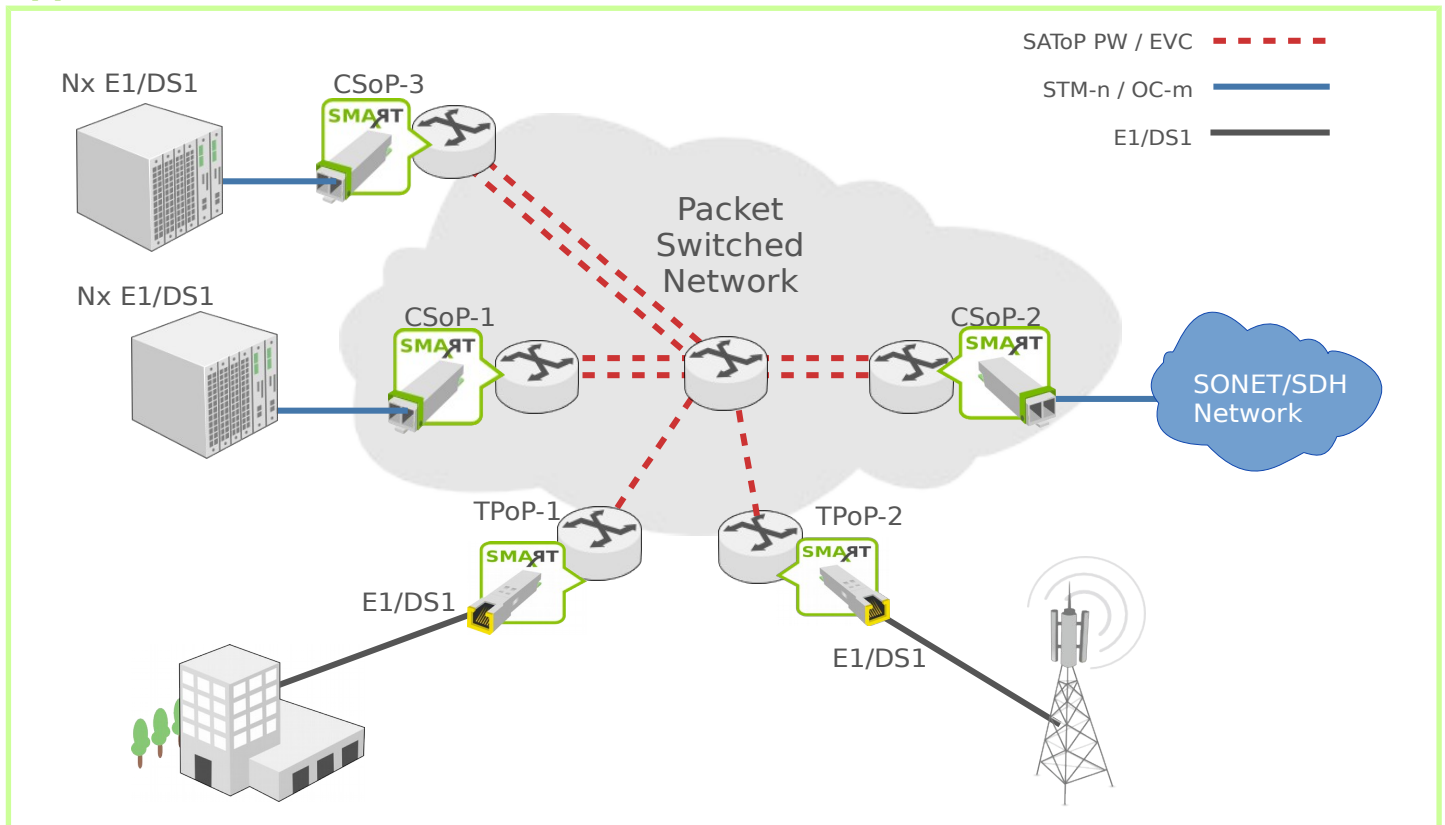
### Application Highlights

- Migrate SONET/SDH access to packet
- Aggregation of low fill SONET/SDH links
- Wireline network migration

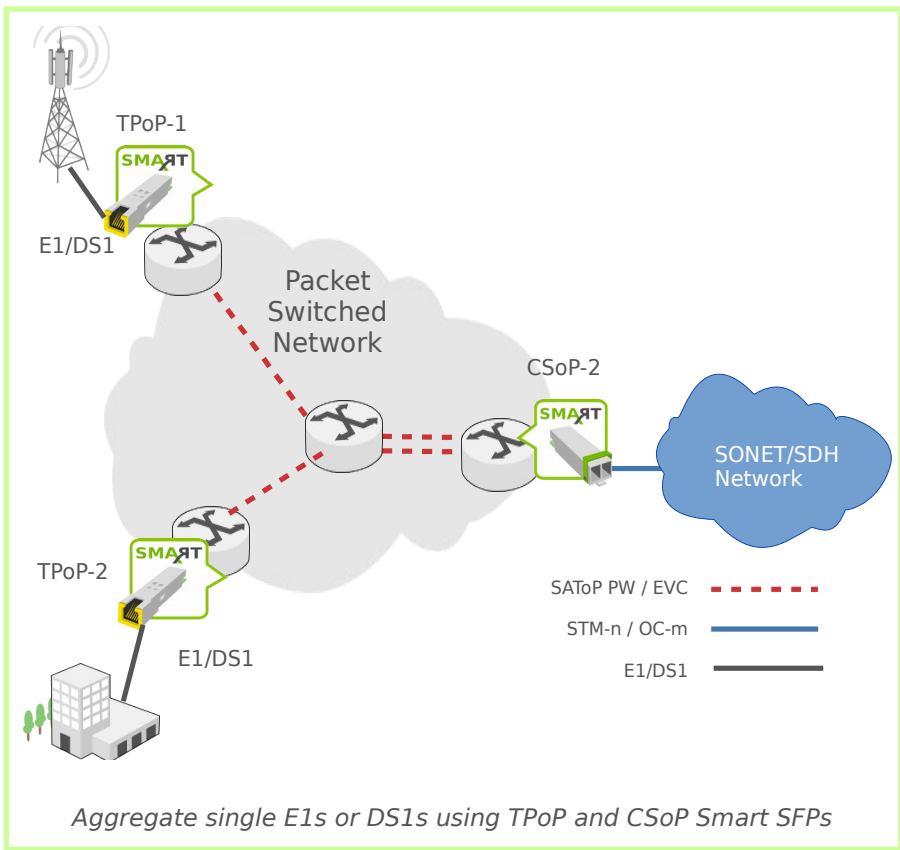
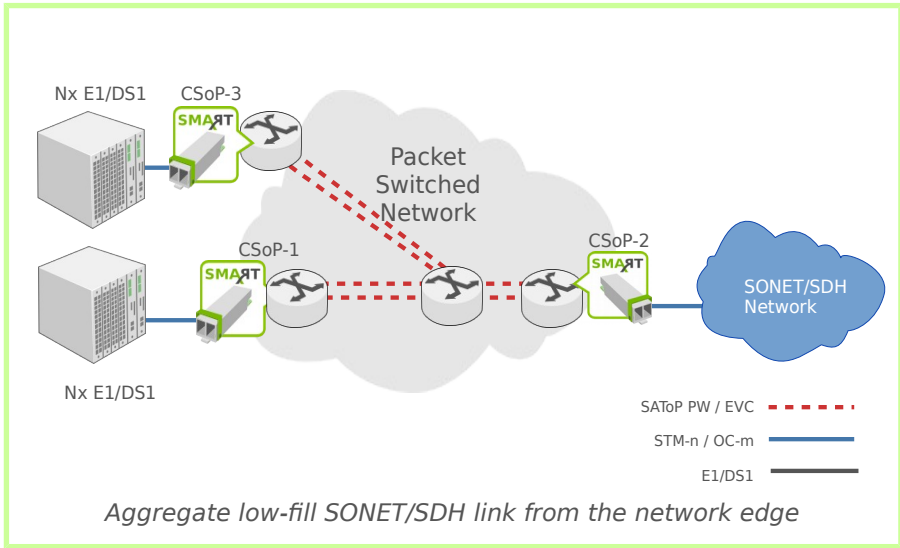
### Benefits

- Very compact size
- Available in wide range of optics
- Low Carbon footprint
- Total cost reduction

### Applications



Aggregate E1s from different locations with CSoP Smart SFP™



## Features

- SFP INF-8074 compliant<sup>1</sup>
- DDM SFF-8472 compliant
- Remote access to Digital Diagnostics Monitoring
- SAToP (RFC4553) packetizer
- DCR clock recovery using RTP header
- MEF8 and MPLS Frame header format
- 63 x E1 SAToP pseudo wires into STM-1
- 84 x DS1 SAToP pseudo wires into OC-3
- Low latency
- 16 ms configurable jitter buffer
- Interop with any E1 SAToP equipment including TPoP Smart SFP™
- Software API and MIBs for management
- Field upgradable packet processor
- OC-3/STM-1 SONET/SDH line rates

## Interfaces

- Compatible with SFP electrical MSA
- LC duplex connector
- Wide range of optical transceiver options
  - Duplex fiber
  - Various optical reaches, up to 80 km
- Available operating temperature ranges:
  - Industrial: -40°C to 85°C

## Contact Information

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<sup>1</sup> Exception: power consumption exceeds MSA limit

