# SMA Series 4: SMA1CP, SMA4CP, STM-1 and STM-4

Customer premises add/drop multiplexers



- Space-saving and easy deployment with an ultra-compact footprint
- Versatile delivery platforms:
  - Full range of conventional traffic interfaces from 2Mbit/s to STM-1
  - ATM and Ethernet interfaces
- Expandable in service
- Meets customer demand with STM-1 and STM-4 aggregates.

The SMA Series 4 SMA1CP and SMA4CP are feature-rich, add/drop multiplexers with full, non-blocking, VC-12 cross-connectivity, providing flexible service delivery. They enable network operators to meet the demands of growing businesses that require large-scale, high-speed, high-quality service provision, while minimizing space requirements through compact design.

## SMA Series 4 SMA1CP and SMA4CP offer:

- Compact, stylish design enabling easy deployment on customer premises
- STM-1 and STM-4 line aggregates

- In-service upgrade. A choice of expansion modules offers additional traffic interfaces from nx2Mbit/s to STM-1, ATM and Ethernet
- X.21 and I.421, 2Mbit/s interfaces are available with an X.21 option for nx64kbit/s and 2Mbit/s leased lines, and I.421 is offered to support primary rate ISDN
- Protected configurations, with two line interfaces, the multiplexers support rings, including SNCP protection and terminal applications with SNCP or MSP
- Optional single-fiber working maximizes revenues and minimizes infrastructure costs
- Tandem Connection Monitoring (TCM) provides valuable performance monitoring and faster fault location
- Ideal for multi-tenanted buildings, with the capacity to serve multiple businesses and compact design to minimize space requirements
- Applications in mobile radio networks for collection and consolidation of traffic from radio base stations.





## **System features:**

- Base module provides up to two independent line interfaces that can be used for east and west, dual parenting or to terminate 1+1 MSP
- The number and type of customer interfaces can be expanded via an expansion module
- Configuration, performance, error and alarm monitoring available centrally via the network management system, or locally via Local Craft Terminal
- Access and security management can be programmed to provide various levels of operator access
- Embedded software can be downloaded for feature enhancement in service. Multiplexers report details of their inventory status either locally or remotely
- Can operate from battery or mains supply.

# **Technical Data**

#### General

Designed to meet the appropriate sections of ITU-T recommendations G.703, G.704, G.707, G.783 and G.957

#### Line interfaces

STM-1 1310nm and 1550nm options to S1.1, L1.1, and L1.2 STM-4 1310nm and 1550nm options to S4.1, L4.1 and L4.2

#### Base module options

4x2Mbit/s with X.21 capability 16x2Mbit/s

## **Expansion modules**

8x2Mbit/s (X.21)
STM-1 electrical/optical
16x2Mbit/s
ATM (CellSpan – ATM UNI interfaces)
3x34Mbit/s
Ethernet (PacketSpan – 10BaseT &
100BaseTx Interfaces)
3x45Mbit/s

## Typical configurations

32x2Mbit/s 16x2Mbit/s + 100BaseTx (Ethernet) 16x2Mbit/s + 3x34Mbit/s 16x2Mbit/s + STM-1

## **Optical connectors**

FC/PC or SC

## Element manager interface

Qecc protocol to ITU-T recommendation G.784 for use of digital cross-connects

### Local terminal interface

ITU-F interface V.24 (RS232) to IBM-compatible PC

## Synchronization outputs

2048kHz to G.703 Section 10 2Mbit/s to G.703 Section 6

## Supply voltage

-48 Vdc to -60Vdc or 110/240Vac. Battery back-up options available

## Mechanical arrangement

Can be mounted on a wall or desk or in an equipment rack

### **Dimensions**

Base unit: 438mm x 220mm x 72mm Expansion unit: 438mm x 220mm x 53mm

#### Environment

ETS 300 019-2 Stationary use at weather protected locations, Class 3.1E temperature-controlled locations

#### **EMC**

EN 300 386-2 ES 201 468 Enhanced availability of service level 2 including: Radiated Emission EN55022 (class B) Radiated Immunity EN61000-4-3 (10V/m) DC power interface ETS 300 132-2

## Safety

EN 60950

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# About Ericsson, Marconi and SMA Series 4: SMA1CP, SMA4CP

Ericsson and Marconi have had a close relationship since 1995. As well as incorporating Marconi network elements into Ericsson's end-to-end optical networking portfolio, the two companies have been co-operating in the development of high-quality, cost-effective, standardized solutions flexible enough to handle any specific customer requirement.

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