

XMC20 SUPM1

POTS line card with 16 POTS (FXS) interfaces with extended voltage protection for dedicated networks

XMC20 SUPM1

The PSTN line card SUPM1 supports 16 ports for traditional POTS services.

Its wide range of configurable modes ensure interoperability with a large variety of exchange protocols.

- 16-port FXS 2-wire interfaces unit
- DTMF and pulse dialling
- CLIP support
- 1+1 path protection supported
- Extended line test functions
- Extended voltage protection for dedicated networks
- All functions from one network management system

Overview

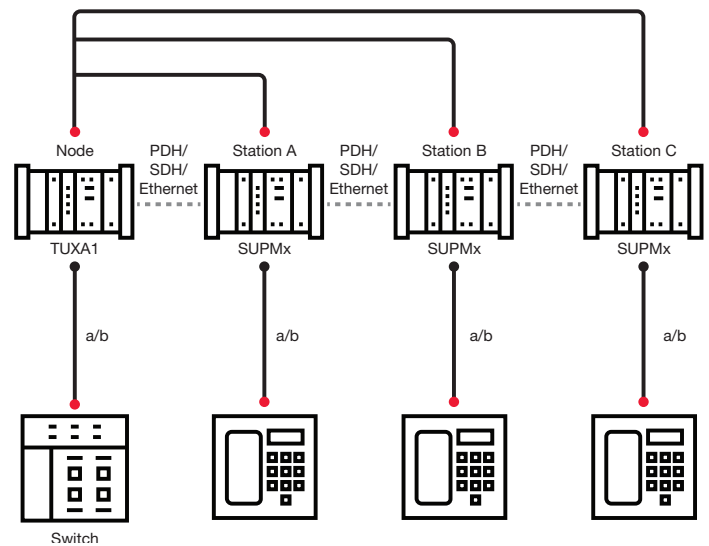
The SUPM1 provides 16 POTS interfaces that connect traditional telephone subscribers to the telecommunication networks. This universal line card supports the POTS requirements of different countries world wide. The SUPM1 is compatible for voice delivery in the access network of dedicated networks and public switched telephone network (PSTN).

POTS in dedicated networks and PSTN

With the available VoIP media gateways in XMC20, POTS services can be directly integrated in VoIP network architectures. In order to achieve maximum interoperability, XMC20 also provides a SIP-based VoIP media gateway, where the protocol can be changed with a software download.

Others like MELCAS, phone-exchange or phone-phone are completing the vast set of operation modes.

This allows network operators to choose the optimum solution for their network or to migrate to other standards if required in the future.



01 Line extension for remote subscribers with SUPM1 and TUXA1

Enhanced line test functions

The integrated line test function on the SUPM1 is a powerful tool used by operators to pre-qualify a subscriber line remotely as well as to perform fault isolation.

The line tests can be launched remotely from the network operation centre.

This simplifies the operation processes and reduces operational cost in the whole sales lifecycle of a POTS service. They can be activated either automatically (cyclic test) or manually (on-demand test), giving operators the freedom to test as required.

Management

The management of the SUPM1 is integrated in the ECST/ UNEM management system. By having one element manager for all types of services, operators will accelerate the provisioning process. This element manager ensures more efficient OAM&P (Operation, Administration, Maintenance and Provisioning) and lower operational costs.

Technical Data

POTS Interface	
Number of POTS ports	16
Mode of Operation	
Softswitches	SIP (via VOIP1)
Other modes	MELCAS (MCAS), phone-exchange, phone-phone automatic ring down
Services	
Analog voice	Supported
Fax/Modem	Supported
Analog Line Parameters	
Line impedance	Configurable
Voice encoding	A-law
Ringing	Supported; on-board ringer
Dialling	DTMF and Pulse
Offhook loop current	15 to 45 mA
Pulse metering	12/16 kHz
Polarity reversal	Supported
Call progress tones	Supported in conjunction with VOIP1
Maximum cable length (Ø 0.6 mm)	11.3 km
Integrated Line Tests	
Isolation tests	Supported
Foreign AC/ DC voltage tests	Supported
Noise tests	Supported
Capacity tests	Supported
Test execution	Cyclic or on-demand
Protection	
1+1 path protection	Supported
SNCP/I	Supported
Management	
ECST	For local management
UNEM	For central management
Power Supply	
Input voltage nominal (min/max)	-48/-60 V DC (-40.5 V DC ... -72 V DC)
Operation Environment	
Temperature range and humidity	According to XMC20 environmental specifications
Emission/Imission	Supports extended requirements for dedicated networks