

XMC25, XMC23 and XMC22

Subracks of the hybrid Multi-Service platform XMC20 for Ethernet with MPLS-TP and legacy services on a single network element

XMC25, XMC23 and XMC22

The subracks of the XMC20 system provide comprehensive Multi-Service features in compact casings.

With XMC20, highly available network nodes are realized to provide access interfaces as well as transport interfaces. This makes the XMC20 ideally fit for mission-critical telecommunication networks in railways/metros, utilities, gas and oil pipeline operators, air traffic management or homeland security.

- 21, 8 or 4 slots for different installation type
- Uplink to transport network with $n \times 10$ GbE or PDH/SDH
- Ethernet and native TDM interfaces in one
- compact network element
- Hot standby of the core unit with fast switch-over times
- Designed for operation in outdoor cabinets
- Fanless operation possible
- Provisioning, configuration and monitoring with an intuitive network management system

Overview

XMC20 provides extreme reliability, compact designs and unique flexibility. With the full hybrid system architecture, XMC20 integrates Ethernet and traditional services in one single network element.

The subracks are the basic elements of the system. They provide 4, 8 or 21 slots for core units, line cards and gateways. By this, it is possible to perfectly adapt the network node to local requirements.



01 XMC25

Hybrid architecture

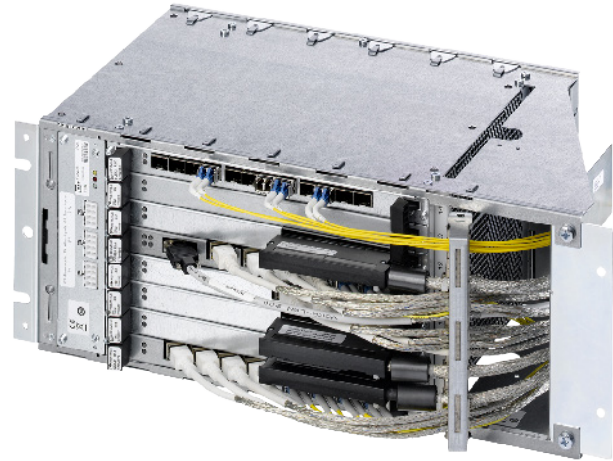
The hybrid system architecture of the XMC20 subracks allows smooth migration from PDH/SDH to Ethernet/IP as well as parallel operation of both network types.

The platform provides electrical and optical Ethernet interfaces as well as a number of traditional data and voice interfaces.

Gateway units are available for carrying packet based data over circuit switched transport networks - or vice versa.



02 XMC22



03 XMC23

Fanless operation

The subracks and the installed cards can be operated without fans. This provides maximum availability because mechanically stressed components like fans may fail and hence strongly reduce the availability.

MPLS-TP

With MPLS-TP, the XMC20 provides deterministic behavior, known from SDH technology, also in Ethernet transport networks.

Safety/redundancy

To guarantee maximum availability of services, the subracks XMC25 and XMC23 can be installed with redundant core units.

Configuration data of the services are kept identical among the active and stand-by core units so that in case of failure, the stand-by unit can fast take over the active core unit role. XMC20 uses a distributed power supply concept with decentralized power supplies on each unit.

This protects against a total failure by an error in a central network part.

XMC25 provides twelve alarm inputs and two alarm outputs that are supported also in network management.

Management

All XMC20 functions are configured, managed and monitored centrally via the management solutions UNEM/ECST.

General	XMC25	XMC23	XMC22
Slots for service units (line cards)	up to 20	up to 7	up to 3
Slots for core units with redundancy	Max. 2	Max. 2	Max. 1 (no redundancy)
Supported fan unit	COOL4	COOL6	COOL8

Dimensions (W x D x H) and weights	XMC25	XMC23	XMC22
Required height units	8 HE (with cabling)	4 HE	2,2 HE
With front cover and cable stacking	482,6 x 306 x 309,5 mm, 7.690 g	482,6 x 306 x 176,1 mm, 5.340 g	482,6 x 306 x 95 mm, 3.600 g
Cable stacking	482,6 x 240 x 87,1 mm, 870 g	contained in 19" adapter	contained in 19" adapter
Heat sink	482,6 x 237 x 87,8 mm, 1.580 g	Not required	Not required
Construction type and design	19"- und ETSI assembly		

Standards

Electromagnetic tolerance	EN 55022, Klasse B EN 50121-4
Safety	IEC/EN 60950-1

Management

ECST	For local management
UNEM	For central network management

Power supply

Input voltage nominal (min/max)	-48/-60 V DC (-39,5 V DC ... -72 V DC)
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Operational environment

Operation temperature range	-25 °C ... +60 °C
Humidity	Building Owners and Managers Association International (BOMA)