

XMC20 SELI8

Versatile TDM (8xE1) services over hybrid TDM-packet networks

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SELI8 provides XMC20 with interfaces towards a TDM network and the capability to provision TDM services on the Public Telecom Network platform. SELI8 provides the uplink for TDM voice and data services via E1 links. Simultaneous coexistence of Ethernet and TDM uplink allows for an easy migration to Public Telecom Network services whilst maintaining some of the current TDM services.

SELI8 works in conjunction with the SDSL8 and SUPM1/SUPM2 units, TDM SHDSL and voice services respectively:

- 8 x E1 interfaces G.703/G.704
- Access to TDM bus in XMC20
- Uplink of MCAS voice
- Uplink of TDM SHDSL data traffic



01 XMC20 SELI8.

Overview

Most MCS networks face the problem of having to maintain some of their TDM services while migrating to an all IP-based network. It is due to this pressing issue that ABB has decided to make available some of the important TDM services within its full hybrid platform, XMC20. The connection of these services to the TDM network is done via E1 links provided in the SELI8 unit.

SELI8 works in conjunction with other service units to create different solutions for the customer in the following manner:

- SDSL8 line card and LineRunner DTM desktop
- For TDM SHDSL based data services
- SUPM1/SUPM2 line card
- For MCAS voice user gap interfaces

SELI8 interfaces

The SELI8 unit features eight electrical interfaces according to ITU-T G.703 for 2 Mbps traffic signals and provides the corresponding crossconnect capacity. The interfaces are available according to the symmetrical 120 ohms and the asymmetrical 75 ohms standard.

Each of the eight 2 Mbps ports of the SELI8 can process signals on the 2 Mbps traffic signal layer:

- Mapping of the 2 Mbps traffic signals
 - Transparent
 - Terminated
- Front interfaces for traffic signals and cables

- The SELI8 provides 8 electrical interfaces according to ITU-T G.703 for
 - 120 ohms symmetrical
 - 75 ohms asymmetrical
- Cross connection for Plesiochronous (structured or unstructured) 2 Mbps signals
- Synchronisation
- Provisioning of timing signals for the PETS timing blocks
- Performance monitoring for structured 2 Mbps traffic signals according to ITU-T G.826. The performance of unstructured signals is monitored in the same way

Management

The XMC20 management and the variety of services are administered centrally by ECST/UNEM. Operators save costs and accelerate the provisioning process with only one element manager for all service types.

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ITU-T recommendations	G.703, G.704, G.823
Bit rate	2,048 kbps ± 50 ppm
Line impedance	75 ohms asymmetrical or 120 ohms symmetrical
Number of ports	8
Performance monitoring	According to G.826
Front connector type	DIN 41612

Power Supply

Input voltage nominal (min/max)	-48/-60 V DC (-40.5 V DC ... -72 V DC)
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Operation Environment

Temperature range and humidity	According to XMC20 environmental specifications
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