

FOX615 LEDE1

Versatile TDM (8xE1) interface for mission-critical networks



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01 FOX615 LEDE1.

Legacy data interfaces are not losing their importance as many applications still demand legacy TDM interfaces in future in order to continue to use the already installed equipment. FOX615/612 Multiservice platform provides legacy TDM interfaces for the connection of these services to the transport network via E1 links of the LEDE1 unit.

Legacy E1 interfaces

LEDE1 unit provides eight E1 electrical interfaces according to ITU-T G.703 for 2 Mbps traffic signals. The E1 interface of the LEDE1 unit can be used as access interface to a transport TDM network or to a transport packet-based network via TDM circuit emulation. The interfaces are available according to the symmetrical 120 ohms and the asymmetrical 75 ohms standard. Each of the eight E1 ports of the LEDE1 can process signals on the 2 Mbps traffic signal layer mapping of the 2 Mbps traffic signals in transparent or terminated modes independently. Additionally, LEDE1 supports 1+1 subnetwork connection protection (SNCP) for P12 and P0-nc signals, revertive and non-revertive.

LEDE1 complements the FOX615/612 Multiservice Platform with the capability to provision TDM services across TDM-based and packet-switched transport networks.

Key features

- 8 x E1 electrical interfaces according to ITU-T G.703 for 2 Mbps traffic signals
- Structured and unstructured traffic according to ITU-T G.704
- Support of transparent and terminated P12 modes
- Front interfaces for traffic signals and cables
- Synchronisation
- Provisioning of timing signals for the PETS timing blocks
- Performance monitoring for structured and unstructured 2 Mbps traffic signals according to ITU-T G.826.

LEDE1 in TDM transport network

The flexibility of the LEDE1 unit is such that it can be also used as a transport unit where data is transported via the E1 interface over TDM network.

Management

All FOX615 functions are managed centrally via the management system FOXMAN-UN or via a local craft terminal FOXCST.

Technical data

Interface	
Electrical	8 x E1 according to ITU-T G.703 and ITU-T G.704
Front connector type	DIN 41612
Bit rate	2,048 kbps ± 50 ppm
Line impedance	75 ohms asymmetrical or 120 ohms symmetrical
Performance monitoring	According to G.826
P12 Layer specific events	Line code violations, Positive slips, Negative slips
Protection Features	
Protection Functions	1+1 Linear Trail Protection 1+1 Subnetwork Connection Protection (SNCP)
Power Supply	
Input voltage nominal (min/max)	-48/-60 V DC (-40.5 V DC ... -72 V DC)
Power Consumption	4W
Operation Environment	
Temperature range and humidity	According to FOX615 environmental specifications
Reliability	121-year MTTF at 35°C (MIL-HDBK-217F)

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