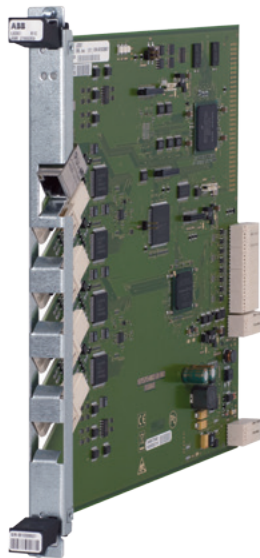


FOX615 LEDS1

The serial interface unit brings powerful functions and high flexibility for TDM data applications on the FOX615 platform



LEDS1 provides different types of data interfaces on one unit, configurable via the network management system. With it you can connect a wide range of data terminal equipment, with different interface types and data rate requirements to only one unit in one slot. This improves sub rack space utilization and optimizes your investment.

01 LEDS1

Main features on LEDS1:

- 4 independent configurable serial ports on one single unit
- Configurable as V.35, X.24/V.11, V.24/V.28, RS-485,
- Additional Ethernet interface
- Point-to-multi point and multi point-to-multi point connections (centralized and distributed conferencing)
- Subnetwork Connection Protection (SNCP)
- 1+1 end-to-end path protection
- 1+1 equipment protection
- Shared protection ring and data conferencing
- Performance monitoring and data conferencing
- All functions from one network management system

Enhanced data service capabilities in FOX615

This unit addresses the specific needs of data services. LEDS1 has access to FOX615's TDM bus, which provides 128 x E1 cross-connect capability. Each LEDS1 port has 2 Mbps access to the TDM bus. Low and high speed data interfaces can be configured on LEDS1.

Low speed interfaces intended for connection to remote terminal unit, protection relays or other devices requiring serial ports as well as high-speed interfaces for large bandwidth applications, such as

connections to routers or modems, are available. LEDS1 can also be used as a data interface to E1 channel converter, allowing up to 52 converters in one single FOX615.

A comprehensive set of protection mechanisms is available in LEDS1, covering end-to-end traffic protection and section protection for point-to-point applications, plus 1+1 equipment protection for redundancy of service units.

The FOX615 platform with LEDS1 also offers a shared protection ring mechanism or data conferencing for protection of point-to-multi point and multi point-to-multi point connections in a ring topology.

Interface flexibility

LEDS1 provides four serial interface ports that can be individually configured via the networks management system in order to cover several types of applications. Each port can be configured as:

- V.35
- X.24/V.11
- V.24/V.28
- RS-485 (2- and 4-wire mode)

An additional Ethernet interface is also available on LEDS1. The access to the TDM bus is non-blocking, all interfaces can be used in parallel.

Supplementary features

In addition to the different types of interfaces supported, LEDS1 offers extra features to enhance data services provisioning:

- Subnetwork Connection Protection (SNCP)
- 1+1 end-to-end path protection
- Point-to-multi-point and multi point-to-multi point connections (centralized and distributed conferencing)
- Shared protection ring and data conferencing.
- 1+1 equipment protection (core functionality / conferencing)

- Performance monitoring

These attributes add even more advantages for data services deployed from a FOX615 network.

Built-in transmission solution

LEDS1, in conjunction with FOX615, provides a complete solution for data services. With its wide range of available interfaces, the FOX615 can easily be deployed in any type of existing network infrastructure. Data services provided via LEDS1 can be multiplexed and transmitted to the network using the TDM, SDH, and packet switched (via CEPI1 or OPIC2, depending on the application) transport technologies of the FOX615 platform.

Technical Data

Ports	
5 interfaces (connector type)	4 serial (METRAL) + 1 x 10/100BaseT (RJ45)
Serial Interface Types	
Configurable multi-protocol interfaces	V.35, X.24/V.11, V.24/V.28, RS-485 (2-wire and 4-wire mode)
Data Rates Supported	
Sub-rates (X.30/V.110)	0.6 ... 38.4 kbps asynchronous and 0.6 ... 56 kbps synchronous
n x 64 kbps	64 ... 1,984 kbps (n = 1 ... 31) synchronous
Transparent	0 ... 600 kbps with oversampling
Ethernet Features	
LAN	10/100 BaseT
WAN	64 ... 1,984 kbps over TDM
Supplementary Features	
Protections	Subnetwork Connection Protection (SNCP), 1+1 end-to-end path protection, Shared protection ring, 1+1 equipment protection
Connection types	Point-to-point, point-to-multi point, multi point-to-multi point, centralized conferencing
Performance monitoring	According to ITU-T G.826
Management	
FOXCAST	For local management
FOXMAN-UN	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 FOX615 environmental specifications