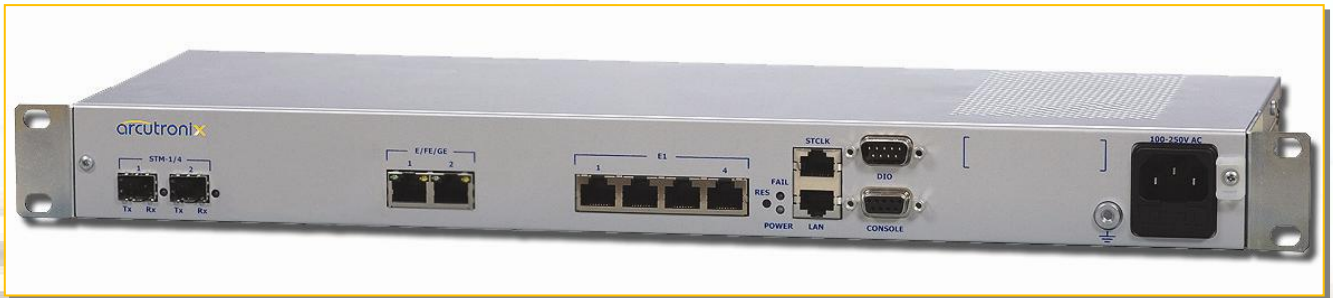# arcutronix

SMX622lite
SDH Service Multiplexer

Introduction

arcutronix SMX622lite, the next-generation SDH Access Device, enables true multi-service carrier-grade access network solutions for tomorrow's converged networks. The cost-effective STM-1/4 Add-/Drop- multiplexer integrates voice, leased line and packet transport on a compact platform. The system is designed for customer premises access as well as metro aggregation networks, furthermore it is very well suited as a transport device in the wireless infrastructure. The SMX622lite is optimized to provide unparalleled density and small size at low cost.

The SMX622lite protects the investments made in the installed SDH network and improves the operator's TDM services and revenue through its higher integration and lower cost solution. In addition, the system supports effective Gigabit-Ethernet transport over the existing network without the need for costly deployment of an overlay network.

Management of the unit is easily integrated in an existing network management solution. The system provides an Ethernet management port for on-site craft maintenance. The SMX622lite provides SNMP alarm traps as well as web-browser based provisioning.

Features

▶ SDH interfaces: STM-1/4 interface enabling SDH carrier class transport.

▶ Access interfaces: E1 plus Gigabit- Ethernet

▶ 2x Hot-pluggable SFP module for flexible reach selection.

▶ Standards compliant Ethernet mapping via GFP, Virtual Concatenation and LCAS for Ethernet private line.

▶ Full-rate 1 Gbps end-to-end

▶ Intuitive web-browser based user interface.

▶ Compact design measuring only 1RU high, 19" wide.

▶ Low power and low cost.

▶ Highly integrated architecture with all functions combined on a single low-cost box

▶ Optimal bandwidth utilization and flexibility is guaranteed by data mapping using GFP, Virtual Concatenation and LCAS.
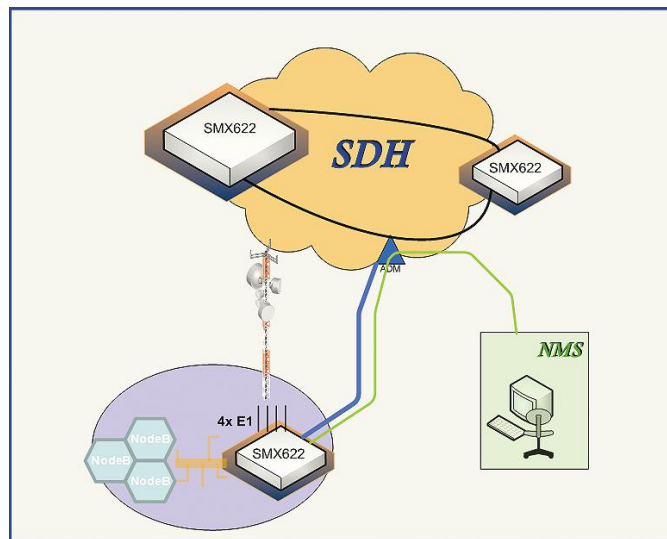
▶ MTU: 5480 Bytes

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Application Examples

SMX622lite can be used as ADM in SDH network. It integrates well with SDH equipment of other vendors, due to its standard conform implementations.

With its broad interface capabilities, the SMX622lite allows back-hauling of very different multi-service applications, e.g. of 2nd and 3rd generation of mobile telephony.

Specifications

Network I/F

- 2 x STM-1 or STM-4 (auto-sensing via SFP) acc. ITU-T G.707, G.793, G.803
- Bit rate: 155,52 Mbit/s or 622,08 Mbit/s
- Pluggable SFP module

Service I/F (user)

- 4 x E1 (2.048Mbps ± 50ppm)
  - ITU-T G.703
  - Line code: HDB3
  - Impedance: 75Ω unbalanced / 120Ω balanced
  - Jitter: ITU-T G.742, G.823 compliant
  - Connector: RJ45
- 2 x 10/100/1000BaseT (RJ45 connector)

Ethernet mapping

- GFP-F encapsulation
- Virtual Concatenation VC-4-xv (1..7), VC-3-xv (1..9) or VC-12-xv (1..63)
- LCAS

Management

- Ethernet 10/100BASE-T for local management access
- Console port (RS232)
- SNMP traps for alarming
- Web-browser based provisioning
- TCP/IP and PPP over dedicated VC12 for remote management access
- OSPF routing for remote management access

Environmental

- Operating conditions: ETS 300 019, class3.1E
- Transport conditions: ETS 300 019, class2.3
- Storage conditions: ETS 300 019, class1.2
- Free convection cooling without the need for fans

Power

- Consumption: <25 VA Input:
  - 110-230 VAC or
  - Redundant 48/60 VDC

Physical

- Standalone (19"):
  - Weight: 1,8 kg
  - Dimensions: 440 (W)×43.5 (H)×180 (D) mm
  - Form Factor: EIA 19", 1RU