OBERON
OPTICAL MULTIPLEXER
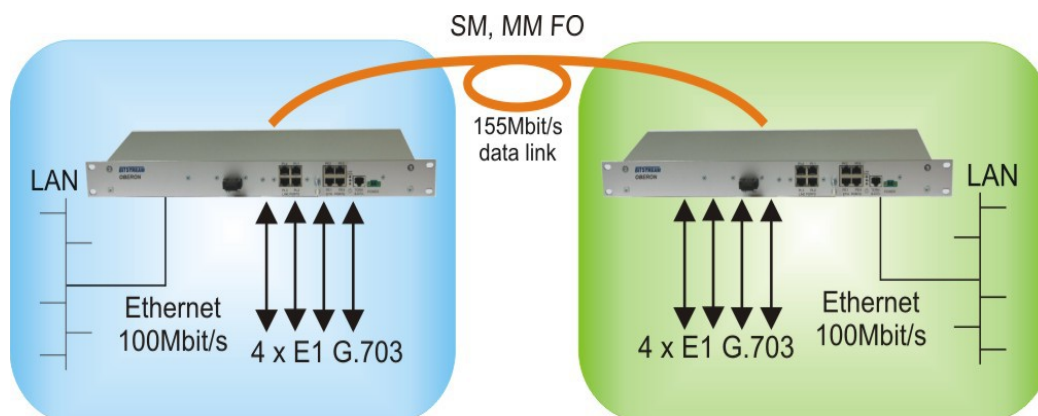# 4xE1 G.703 2048kbit/s + 100 Mbit/s Ethernet

OBERON

- Connection of LAN Ethernet 10/100 Mbit/s + 4 E1 G.703 2048kbit/s lines through a fibre optical link
- Built-in 4-port Ethernet switch with an array of 1000 MAC addresses
- IEEE 802.1q support. Possibility of defining up to 15 VLAN networks (full range VID)
- Maintenance and management: WWW, Telnet, SNMP, RS232 serial port
- QoS support (depending on default port priority, VLAN priority, IP DSCP field)
- Optional power supply redundancy

OBERON is a high performance optical line transmission equipment, combines four ITU-T G.703 compliant standard electrical E1 2048 kbit/s lines plus 100/10 Mbit/s Ethernet signal into an optical data stream for transport over fiber optic. Several transmitter options are available (including WDM version and with SFP module).

OBERON is equipped with advanced built-in 4-port Ethernet switch. Ethernet transmission channel may be set as transparent or divided into independent transmission channels through the virtual VLAN mechanism. Each Ethernet port supports programmable rate limiting from 64kbit/s to 100Mbit/s and port priority setting (depending on default port priority, VLAN priority or IP DSCP/TOS), as well as "flow control" and "autocrossover" mechanisms.

Embedded HTTP server, TELNET server and SNMP agent allows free configuration of the device performance by standard Web browser and continuous monitoring from any management platforms equipped with SNMP client. In addition, built-in SMTP service daemon allows to notify the operator in case of system failure. Device management is carried out out-of-band using dedicated Ethernet port.

Remote software update is supported to allow further functionality improving.

OBERON multiplexer is powered from DC voltage from 12 to 60V power supply or from an external adapter in case of AC voltage. Total power consumption does not exceed 6W. Device can be optionally equipped in additional 230V AC power supply to provide power supply redundancy.

PARAMETERS

Multiplexing

- Number of E1 channels - 4
- Throughput Ethernet data stream – 100 Mbit/s
- Number of RS422/485 interfaces – 1 (OBERON-RS)

Management

- SNMP
- HTTP protocol and web browser as a management application
- SMTP -send e-mail message in case of failure
- Out of band, by dedicated Ethernet port
- Through the terminal port RJ-45(9600,N,8,1) – Preliminary configuration

Optical ports

- 155Mbit/s transmission speed
- SC/PC connectors
- Fibre type 9/125um, 62,5 / 125um, 980/1000um
- Ranges depending on the type of optical port 15km, 50km, 120km (1550nm), 20km WDM, 40km WDM, 60km WDM, 100km WDM, 300m (POF)

OR

- SFP module

Ethernet ports

- Baud rate 100/10Mbit/s
- Flow control function
- Autocrossover function "MDI, MDI-X
- Support for VLAN, IEEE 802.1q, QoS, IEEE 802.1p
- Connection state signalling
- 4xRJ-45 connector

Line interface 2048 kbit/s

- ITU-T G.703
- 2048 kbit/s ± 50 ppm binary throughput
- 120 Ohm E1 impedance
- Line code HDB-3
- Types of connectors: RJ-45

Dimension

- Housing 483x170x44mm
- Weight < 1kg

Power

- Supply voltage range 12 to 60V DC
- External power supply included 230VAC/48VDC
- Up to 6W power consumption
- Optional redundant power supply module