# Kronos

## E1/T1 Audio, Data & IP Multiplexer



**Kronos** E1/T1 Multiplexer is a system that allows transportation of voice channels, high quality audio and data across E1/T1 links, using time division multiplexing (TDM). The Kronos multiplexer supports up to four E1 or T1 links. It is possible to drop/insert time slots across any of the connected E1/T1 circuits as well as to program an automatic failover mechanism between E1/T1 links.

### **Specifications:**

It is implemented using a modular construction on a common backplane architecture in 19" rack. It is possible to cascade up to 4 racks together. This all gives great flexibility in the choice of input and output modules depending on the requirements of each application.

- Ability to connect up to four E1/T1 circuits to one base device.
- Up to 12 audio cards (encoder/decoder): 24 Mono/12 Stereo Full duplex channels per rack.
- Automatic failover mechanism between E1/T1 links.
- Drop/insert across any of the connected E1/T1 circuits.
- Option of redundant AC or DC power supply.
- AC or DC (48V) power supply.
- Hot swapping of modules to make servicing and updating easier.
- Option to extend the configuration with additional racks (up to a maximum of 4 racks).
- Local or remote control and configuration through LAN interface (SNMP) via ProdysControl.
- Ability to assigning time-slots for IP traffic dynamically. Routed interconnection of LAN through E1/T1 circuits.
- Totally configurable audio modules by software: selection of analog or digital interface as well as encoding/decoding algorithm.
- Bi-di rectional module of synchronous data (two ports per module). The interface can be configured V35/X21 and as DTE or DCE.
- Powerful alarm system with notification via GPO and relay output.

#### **Base Device**

- Modular 4RU, 19" width rack.
- Up to 4 E1 or T1 Multiplexed modules with drop insert and automatic failover capabilities.
- X21 module for synchronous data transmission N x 64 Kbps.
- Encoder/decoder modules with analog and digital AES/EBU audio inputs and outputs and auxiliary data.
- PBX interconnection module.
- TC/IP Control Module.
- Redundant Power Supply.
- Management software control.
- Extension module to cascade more subracks.

#### **Kronos Modules:**

#### **Power Supply**

 AC Power Supply and DC Redundant Power Supply (48V). Monitoring of status and power supply failure.

#### E1/T1

- E1/T1 full duplex with up to four E1/T1 links (2/1544Mbps) per frame.
- Drop/Insert functions among any of the four E1/T1 connected circuits.
- RJ45 and BNC connectors.

#### **Audio Encoder & Audio Decoder**

- These modules supports both analog and digital inputs/outputs. Supported compression modes are:

J41, J42, J57, ISO MPEG  $1\!\!/_2$  Layer II, ISO MPEG  $1\!\!/_2$  Layer III, apt-X, G711 and G722.

#### Control

- Control and monitoring functions over IP or RS232.
- It acts also as a router, interconnecting LAN networks through E1/T1 links.

#### **Synchronous Data**

- Allows synchronous transmission of data at Nx64Kbps.
- Free assignment of the number of slots. Provides two WAN V24/V35 interfaces.

