Universal TDM, E1 interface converter platform, fractional multiplexer, cross connect device with exchangeable user interface module and optional built-in AES encryption



KG





- Device enables user to connect their equipment over exchangeable user interface module via TDM E1 based telecommunication network
  - Built in non blocking cross connect enables easy and cost effective adddrop of user interface traffic over spare, non used, E1 time slots with minimum delay including CAS signalling
- Basic Features:
  - 2 E1 framed or non framed interfaces.
  - I factory exchangeable user interface module with different number and/or interface types
  - Non blocking cross connect between E1 links and user interface modules including CAS signaling, where applicable
- Different user interface modules with: X.21/V11, V.35, NRZ/NATO, RS232 synchronous and asynchronous interfaces
- Embedded Web server for local managamnet
- Embedded SNMP agent for TMN application
- Optional AES 128/192/256 encryption of user interface data

 TELECOMMUNICATIONS AND ELECTRONICS

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# KG Universal Platform

## Application

KG Series Interface Converter is usually used for connecting different devices through a transport TDM digital network that is based on the E1 interface.

In public and private telecommunication networks KG Series typically finds application for:

- Connecting remote LAN segments
- Connecting users to ISP
- Connecting remote terminals
- Remote video surveillance
- Industrial process control.
- Traffic control.
- SCADA systems
- In special service networks which requires data encryption.



### **Basic features**

- The device convert user signal from removable interface modules to E1 signal in one of two E1 network interfaces and vice versa
- E1 links can be configured to work in framed and unframed mode
- Maximum conversion speed in unframed mode is 2048 kbit/s
- In framed mode it is possible to perform the capacity allocation of user signal from removable module to one of the E1 network interface in 64 kbit/s steps
- Unassigned capacity of E1 link can be mutually crossconnect or unlocated E1 link can be used as a protection link (1+1)

- Advanced fault diagnosis (loop test, integrated BER tester) of E1 and user interfaces
- The device can be synchronized from received E1, external reference or from received signal of user (synchronous serial) interface
- Control of remote devices in framed mode; allocating appropriate capacity of E1 signal to the system for centralized monitoring
- Content from the user interface can be encrypt or decrypt before mapping to the desired E1 direction
- The desktop version of the device can be used independently as an interface converter
- In board version of the device can be used as an independent interface converter, or as a part of fractional multiplexer, which in itself combines multiple interface converters with an appropriate user interfaces
- Centralized monitoring and supervision based on the standard packet protocols, SNMP, HTTP, ICMP...

## **Ordering codes**

#### KG-<u>I-P</u>-<u>S</u>

- I Digital Interface:
  - E Ethernet
    - X X.21 codirectional or contradirectional
    - V V.35
    - R/2R 1/2 x RSR232 asynchronous and synchronous
    - N  $NRZ/NATO, 75/50 \Omega$
    - C/2C 1/2 x G.703 codirectional, 64 kbit/s
    - DIO 8 digital inputs / outputs

#### - Analog interfaces:

- FXS analog telephone, user side
- FXO analog telephone, exchange side
- E&M 2w/4w analog exchange side
- AlO 8 analog inputs / outputs

#### P - Power Option

- D 48 Vdc with external DC/DC adapter
- N 220 Vac with external AC/DC adapter
- R card rack version

#### S - Encryption Option

- \_ no encryption
- S with encryption



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