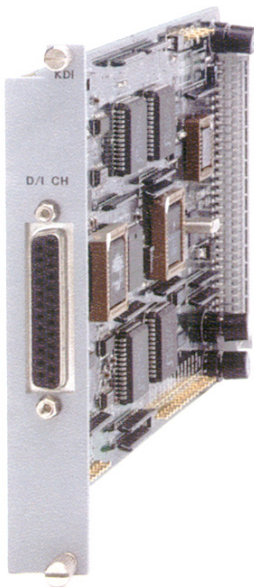


## Kilomux-2100

## KDI

## Bypass and Multidrop Module



Provides bypass and drop-and-insert between dual links of Kilomux-2100

- "V" or daisy-chain configuration
- Bypassed channels can be cross-connected
- High quality voice communication in "V" configuration
- Optional V.24/RS-232 port for multidrop/polling (KDI/M module)
- Manual bit allocation in the main link frames

KDI is a bypass and drop-and-insert module for Kilomux-2100 units equipped with dual links. It enables connecting two remote Kilomux units via a central Kilomux-2100 unit (see *Figure 1*). In addition, it allows networking multiple Kilomux units in a daisy-chain configuration (ring topology).

KDI bypasses any channel or group of channels between Link A and Link B of the Kilomux-2100 unit. The bypassed channel(s) can be of any size and traffic type, and can change position within the frame, to provide Link A to B cross-connect capability.

For applications requiring high-quality voice communication between two remote sites via a central site (dual link "V" configuration), KDI ensures high-quality voice reproduction, by providing full bypass of the digital transmission. This eliminates unnecessary D/A and A/D conversions.

Bypassing is supported only if both Link A and Link B belong to the same data rate group as follows:

- Group 1: 9.6, 14.4, 19.2, 28.8 and 32 kbps
- Group 2: 48, 56, 64 128 and 192 kbps
- Group 3: 256 and 384 kbps
- Group 4: 512 and 768 kbps
- Group 5: 1024 and 1536 kbps.

For applications involving transfer of signaling end-to-end (either voice or data), all channels of an individual I/O module must be either bypassed or dropped together as a group.

KDI occupies the optional slot (Slot 6) reserved for KDI/KAI modules in the 3U-high Kilomux-2100 enclosure. Only one KDI module is used per chassis.

Multidrop/polling is implemented using a daisy-chain configuration. The polling "Master" which is connected to one Kilomux unit, transmits in parallel (broadcast) to all "Slave" DTEs connected to the other Kilomux units. A "Slave" DTE raises the RTS signal in order to transmit to the "Master".



## KDI

## Bypass and Multidrop Module

This application is available as a special ordering option – **KDI/M**. The KDI/M module is equipped with a dedicated V.24/RS-232 port for connecting to the multidrop/polling DTE.

Manual bit allocation in the main link frames allows more convenient use of the KDI module and placing identical I/O modules in different slots of interoperating Kilomux-2100 units.

**Note:** Manual bit allocation cannot be performed using the RADview platform (only by terminal or Telnet).

## Specifications

### Data Rates

Sync/async: 0.3, 0.6, 1.2, 2.4, 4.8, 7.2, 9.6, 14.4, 19.2, 28.8, 38.4, or 57.6 kbps  
Sync only: 8, 16, 24, 32, 48, 56, or 64 kbps

### Async Parameters

Data bits: 5, 6, 7, or 8  
Stop bits: 1  
Parity: transparent

### Clock Options

DCE for connection to a DTE  
DTE1 for connection to a tail-end modem

### Multidrop Channel Interface (KDI/M only)

V.24/RS-232 (25-pin D-type female connector) DCE

### Diagnostics

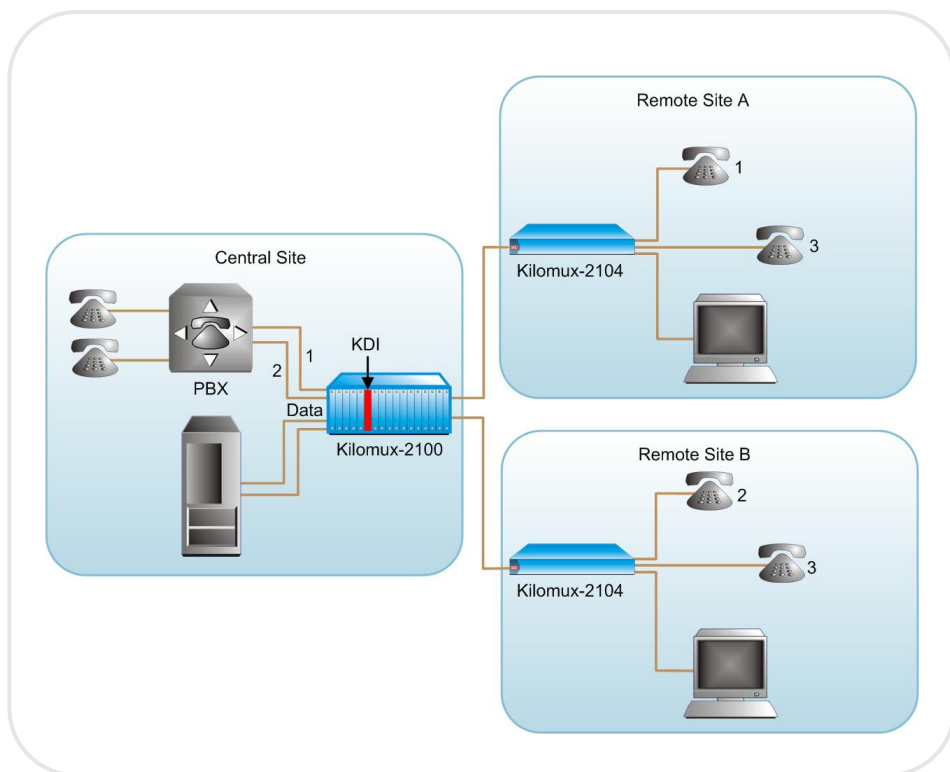
Local channel loopback towards the DTE  
Remote channel loopback toward Link A or Link B  
PRBS injection toward Link A or Link B

## Ordering

**KM-2000M-KDI/\***

### Legend

- \* Multidrop (Default=without multidrop):
- M** V.24/RS-232 connector for multidrop/polling



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