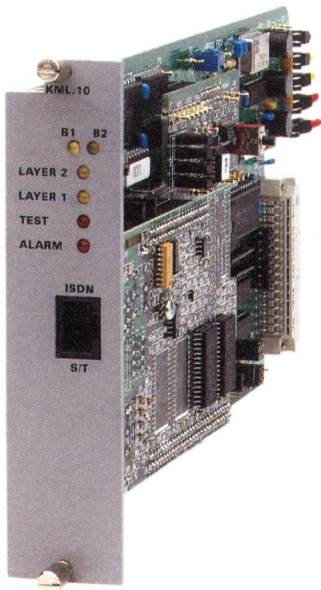Kilomux-2100

KML.10

ISDN Main Link Module

- Access and backup over 64 or 128 kbps link
- Leased line or switched services
- Single "S" BRI (2B+D) interface
- All Kilomux I/O modules: data, voice/fax and LAN are supported

The KML.10 main link interface allows direct connection of Kilomux to an ISDN line, without an external terminal adapter.

The KML.10 module enables Kilomux to provide automatic backup of its main link over switched ISDN networks (see *Figure 1*).

In countries where leased line ISDN services are available, KML.10 is used to provide a non-switched connection for Kilomux (see *Figure 2*).

To enable economical ISDN service to small offices, KML.10 features dial-up ISDN. Connection can be activated manually or on traffic detection (from data cards and analog voice cards) (see *Figure 3*).

KML.10 transmits one or two B channels over a 64 kbps or 128 kbps link (main or backup). The module provides access to low speed data networks. It allows transferring compressed voice, fax messages and slow scan video conferencing. Additionally, it processes the D channel of the BRI interface for control and signaling information, in order to set up or break down the voice/data calls.

KML.10 implements the TE side of an ISDN "S" BRI interface. Interface is provided via an RJ-45 8-pin connector.

Proprietary BONDING and automatic self-test upon power-up are standard features of KML.10.

The unit can be configured, controlled and monitored via an ASCII terminal or the RADview-EMS Network Management System.

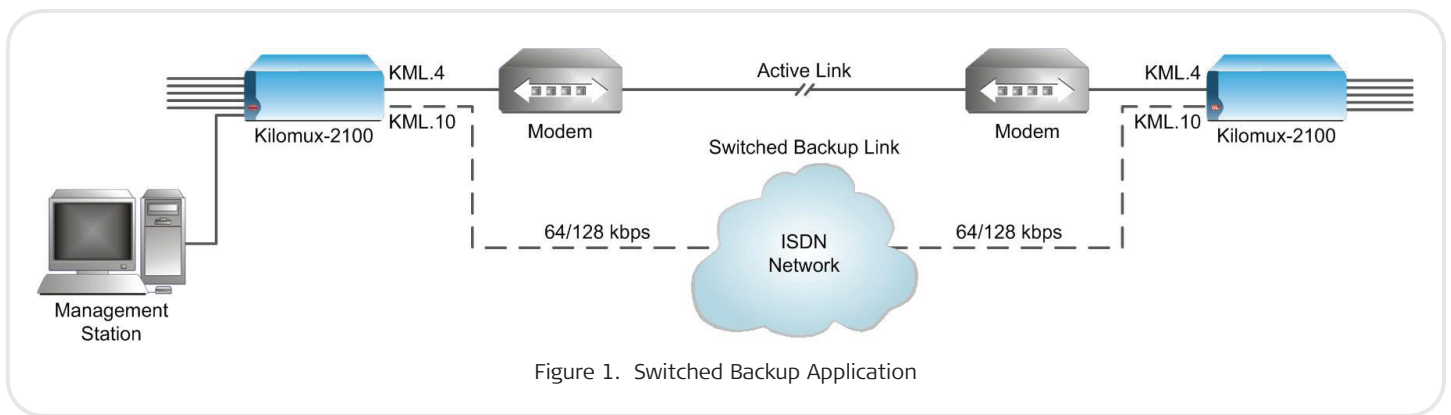## Connects Kilomux to ISDN Basic Rate Services
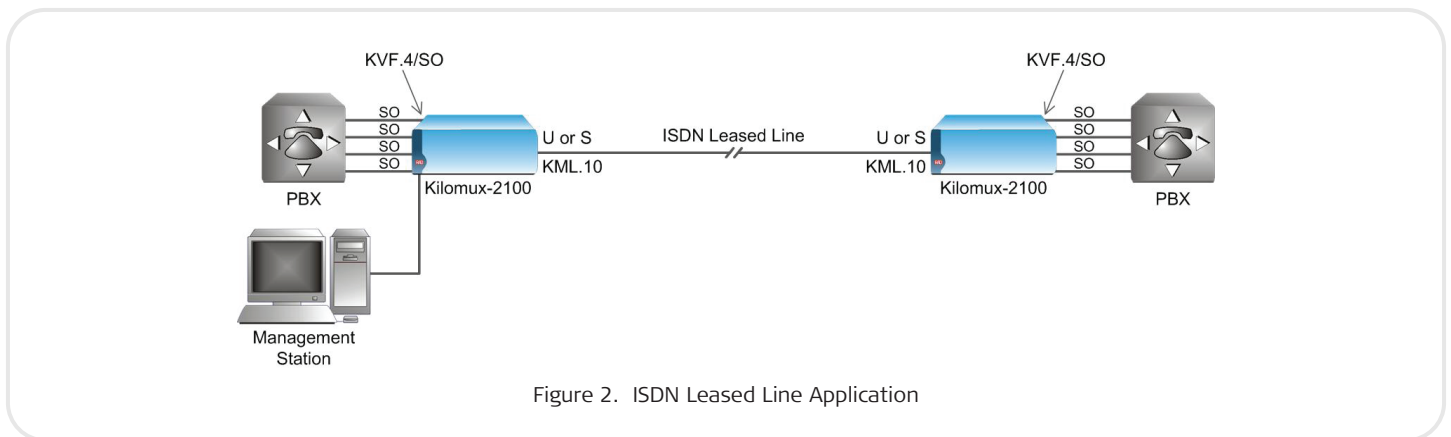
Figure 1. Switched Backup Application

Figure 2. ISDN Leased Line Application

Specifications

INTERFACE

Number of Channels
1 BRI channel (64 or 128 kbps)

Switching Groups
NTT for Japan
Euro-ISDN for Europe
5ESS, DMS100, NI1 for USA.

Standards
ITU I.430, Q.921, Q.931
ETSI NET 3, i-CTR3

Signal Format
Pseudoternary line coding

Line Type
Two unloaded twisted pair cables

Impedance
100Ω, balanced

Range
"S" interface: 1000m (3300 ft)

Transmit Timing
DTE

Connector
RJ-45 (8-pin)

CHANNEL INTERFACE COMMUNICATION

The interface toward Kilomux is synchronous full-duplex (64 kbps for one B channel or 128 kbps for two B channels).

GENERAL

Timing Elements
The module timing is locked onto the network clock. Kilomux operates as a DTE.

Indicators
B1, B2: Flashes during B channel
    synchronization for 128 kbps ON when
    transferring user data
LAYER1: On when ISDN layer 1 is
    synchronized
LAYER2: On when ISDN layer 2 is
    synchronized
TEST: On when a test or loopback is active
ALARM: On when alarm condition is
    detected

Management
Programmable via Network Management System or ASCII terminal.

Environment
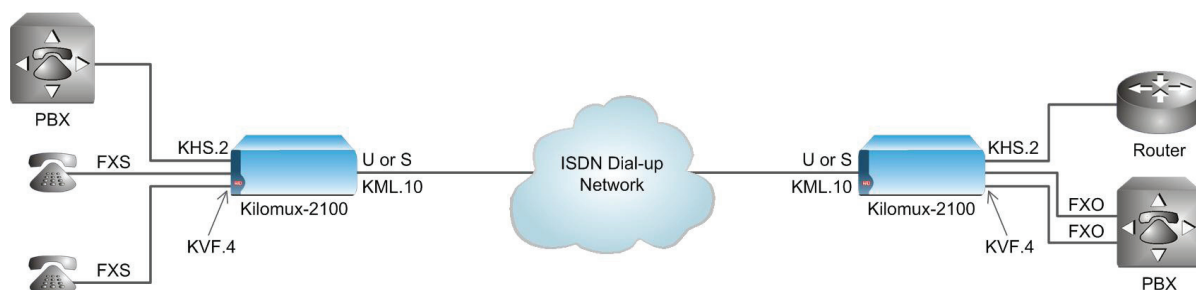Operating Temperature: 0-50°C (32-122°F)
Humidity: Up to 90%, non-condensing

Figure 3. ISDN Dial-up Application

KML.10

ISDN Main Link Module

Ordering

KM-2000M-KML.10

Table 1. Kilomux-2100 Main Link Interface Modules

	Interface	Connector	Data Rates
KML.1/N	V.35	34-pin, female	9.6, 14.4, 19.2, 28.8, 32, 48, 56, 64, 128, 192, 256, 384, 512, 768, 1024, 1536 kbps
KML.2/N	RS-232	DB-25, female	9.6, 19.2, 32, 48, 56, 64, 128 kbps
KML.3/N	RS-530	DB-25, female	9.6, 14.4, 19.2, 28.8, 32, 48, 56, 64, 128, 192, 256, 384, 512, 768 , 1024, 1536 kbps
KML.4/N	X.21	DB-15, female	
KML.5/N	G.703 Codirectional	8-pin, RJ-45	64, 128 kbps
KML.6/N	Compatible with AT&T PUB 62310	8-pin, RJ-45	9.6, 19.2, 56 kbps
KML.7	T1 G.703, G.704, AT&T TR-62411, ANSI T1.403 (D4-SF, ESF)	8-pin, RJ-45	56, 64, 128, 256, 384, 512, 768, 1024, 1536 kbps
KML.8	E1, G.703, G.704, G.732 (including CRC-4 and E bit)	8-pin, RJ-45, balanced Two BNC coaxial, unbalanced	56, 64, 128, 256, 384, 512, 768, 1024, 1536 kbps
KML.10	ITU-T Rec. I.430, Q.921, Q931	8-pin, RJ-45	64, 128 kbps
KML.11	Ethernet (TDMoIP)	8-pin, RJ-45	56, 64, 128, 192, 256, 384, 512, 768, 1024, 1536 kbps
KML.F	850/1310/1550 nm, single/multimode, LED/Laser	ST or FC/PC	128, 192, 256, 384, 512, 768, 1024, 1536 kbps

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