

Kilomux-2100

KML.8

Fractional E1 Interface Main Link Module



- G.732N (2 frames) and G.732S (16 frames) framing formats, with or without CRC-4
- Optional built-in LTU
- Compatibility with all carrier provided E1 services
- Three timing options

The KML.8 main link module allows direct connection of Kilomux to fractional E1 services, eliminating the need for external conversion equipment. KML.8 places Kilomux framed information over standard E1 frames that can be transmitted via an E1 network to another Kilomux at the remote end.

KML.8 is compatible with all carrier-provided E1 services, complying with ITU-T Rec. G.703, G.704 and G.732. Both two (256N) and 16 (256S) frames per multiframe formats are supported. CRC-4 and E bit, comply to G.704. CRC-4 performance monitoring complies to G.706 and G.821. Zero suppression over the line is HDB3.

KML.8 operates at the following link speeds: 56, 64, 128, 256, 384, 512, 768, 1024 and 1536 kbps. Three timing options are available: LBT (clock is locked on the network), Internal and DCE (external).

The Kilomux composite link is placed into one to 24 timeslots on the E1 frame. The first timeslot on the E1 frame is user-configurable, followed by sequential timeslots assigned by the system according to data rate.

Diagnostic capabilities include local and remote loopbacks on the E1 link.

KML.8 parameters are monitored and controlled via the Kilomux management systems.

Connects Kilomux to
Fractional E1 services



data communications

The Access Company

KML.8

Fractional E1 Interface Main Link Module

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	9.6, 14.4, 19.2, 28.8, 32, 48, 56, 64, 128, 192, 256, 384, 512, 768, 1024, 1536 kbps
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

Specifications

Standard Compliance

ITU-T Rec. G.703, G.704, G.732 (including CRC-4 and E bit)

Framing

G.732N [2 frames per multiframe (256N) format] with CRC-4

G.732N [2 frames per multiframe (256N) format] without CRC-4

G.732S [16 frames per multiframe (256S) format] with CRC-4

G.732S [16 frames per multiframe (256S) format] without CRC-4

Link Speed

56 kbps, 64 kbps, 128 kbps, 256 kbps, 384 kbps, 512 kbps, 768 kbps, 1024 kbps and 1536 kbps

Line Code

AMI

Zero Suppression

HDB3

Impedance

120 Ω , balanced

75 Ω , unbalanced

Signal Level

Receive:

With LTU: 0 to -36 dB

Without LTU: 0 to -10 dB

Transmit:

$\pm 3V$ ($\pm 10\%$), balanced

$\pm 2.37V$ ($\pm 10\%$), unbalanced

Jitter Performance

As per ITU-T G.823

Connectors

RJ-45 8-pin, balanced

Two BNC coaxial, unbalanced

Transmit Timing

Internal: ± 50 ppm

LBT: ± 130 ppm

DCE: ± 50 ppm

Diagnostics

Local loop

Remote loop

Statistics

Local support of CRC-4 diagnostics same as AT&T PUB 54016

Timeslot Allocation

Consecutive (bundled) Alternate

Indicators

Local sync loss (Red alarm)

Remote sync loss (Yellow alarm)

Test

Alarm

Management

Programmable via any one of the Kilomux management methods.

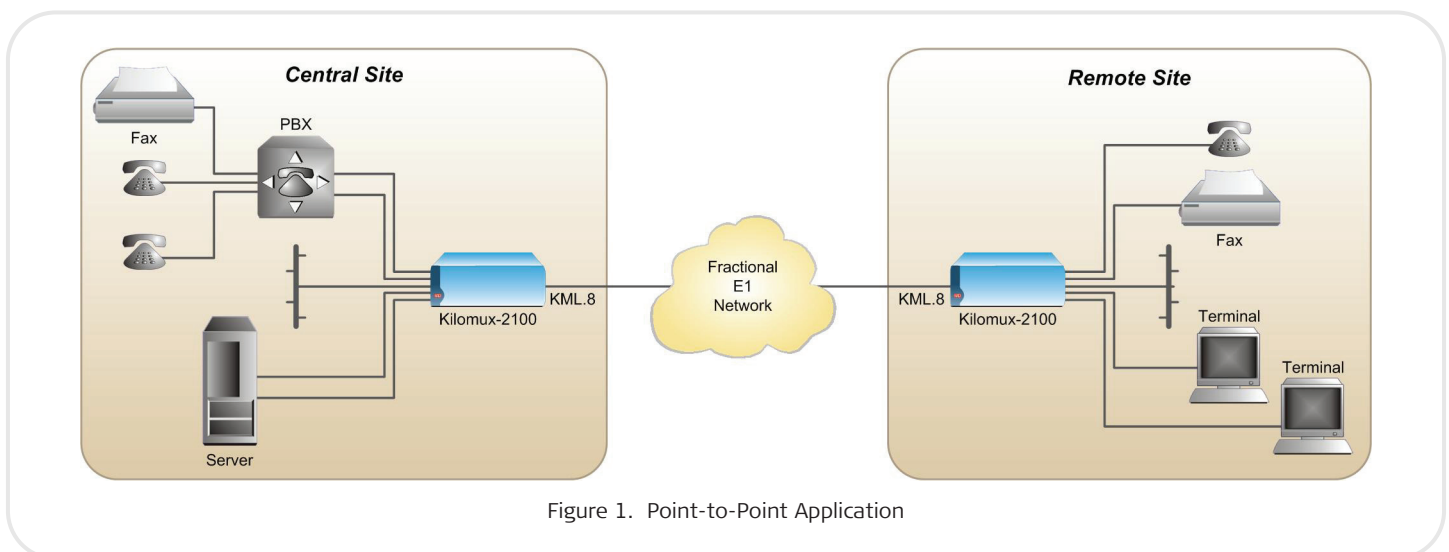


Figure 1. Point-to-Point Application

KML.8

Fractional E1 Interface Main Link Module

Ordering

STANDARD CONFIGURATION

KM-2000M-KML.8

SPECIAL CONFIGURATION

KM-2000M-KML.8/LTU - with LTU

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