

Kilomux-2100

KML.1-5/N

Main Link Modules



- Flexible system timing options
- Wide range of supported data rates
- Kilomux-2100 supports installation of two main link interface modules in one chassis
- Dual-link operation, redundancy, and priority bumping main link operating modes are available when installed with an additional KML module

Connecting Kilomux units by a digital link

The KML.1-5/N modules enable the connection of Kilomux-2100 units by a modem link, a digital multiplexer channel, or any other type of digital link.

In a Kilomux-2100 enclosure, a KML module can be installed either alone or together with another main link interface module. When installed together with a KML module of the same or another type, it is possible to use most of the main link operating modes offered by the Kilomux-2100 system, for example, dual-link operation, redundancy, and priority bumping.

TIMING

Kilomux-2100 allows the user to select a preferred timing reference source (main, or master, source), and a fallback mode for use in case the main source failed. If both the main and fallback sources fail, Kilomux-2100 switches to an internal oscillator.



KML.1-5/N

Main Link Modules

KML.1/N, KML.2/N, KML.3/N and KML.4/N modules feature three main link timing modes: DTE, External DCE, and DCE.

KML.5/N modules feature two main link timing modes: internal (INT) and loopback (LBT).

INDICATORS

The operator can monitor each main link interface module by indicators that indicate the following:

- Module status
- Activity on the receive and the transmit paths of the main link
- Local and remote system synchronization status

The operator can also monitor the module via a supervision terminal.

DIAGNOSTICS

The KML modules perform self-test upon power-up. Additional testing and diagnostic functions can be performed by the operator from a supervision terminal.

The testing capabilities include local main link loopback (where the main link transmit signal is looped back to the input of the main link receive path), and the remote main link loopback (toward the remote Kilomux-2100).

In addition, main link modem loopbacks (designated loop 2 and loop 3 by ITU-T Rec. V.54) are available to check the connections between the KML.1/N, KML.2/N or KML.3/N modules and the modem serving the main link.

Table 1. Kilomux-2100 Main Link Interface Modules

Name	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	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

Interface

See *Table 1*

Connector

See *Table 1*

Data Rates

See *Table 1*

Control Signals

RS-232, V.35: Local support of all control signals

V.36: Local support of all control signals, except RI

Clock Modes

KML.1/N, KML.2/N, KML.3/N, and KML.4/N:

- DTE
- External DCE
- DCE

KML.5/N:

- Internal
- Loopback

Alarms

Local loss of sync

Remote loss of sync

Diagnostics

Power-up self-test

Continuous self-test during normal operation

Local loopback

Remote loopback

Loop 2 and loop 3 on main link modem as defined in ITU T Rec. V.54

Indicators

Power – Green

Transmit – Yellow

Receive – Yellow

Local sync loss – Red

Remote sync loss – Red

Management

Programmable via the Kilomux management system

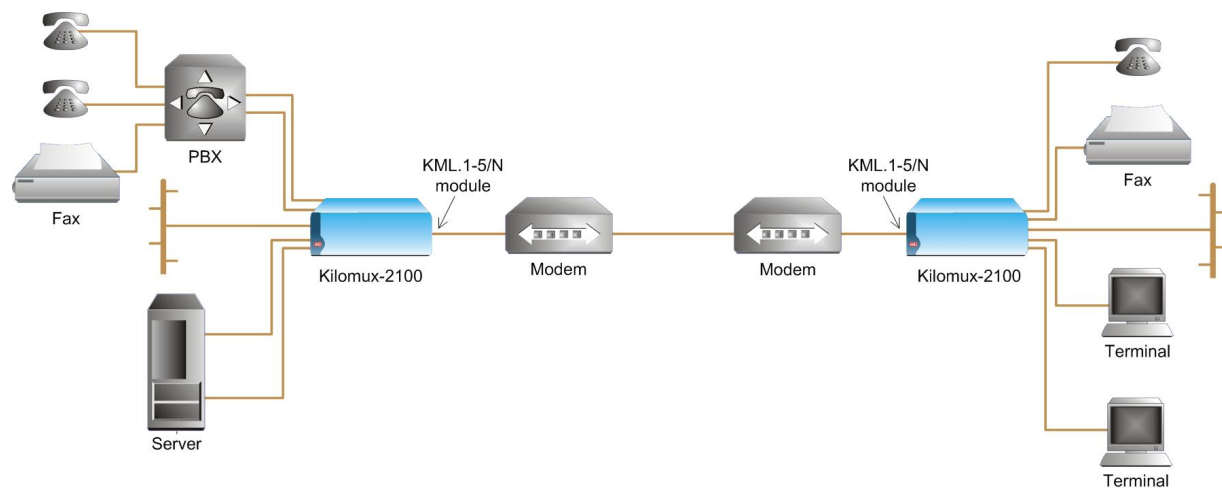


Figure 1. Connecting Kilomux by a Modem Link

KML.1-5/N

Main Link Modules

Ordering

KM-2000M-KML.1/N

KM-2000M-KML.2/N

KM-2000M-KML.3/N

KM-2000M-KML.4/N

KM-2000M-KML.5/N

420-120-03/08 Specifications are subject to change without prior notice. © 1988-2008 RAD Data Communications Ltd. All other trademarks are the property of their respective holders.

International Headquarters
24 Raoul Wallenberg Street
Tel Aviv 69719, Israel
Tel. 972-3-6458181
Fax 972-3-6498250, 6474436
E-mail market@rad.com

North America Headquarters
900 Corporate Drive
Mahwah, NJ 07430, USA
Tel. 201-5291100
Toll free 1-800-4447234
Fax 201-5295777
E-mail market@radusa.com

www.rad.com



data communications
The Access Company