

2-Channel High Speed Data Module



FEATURES

- Provides two synchronous high speed data channels
- Selectable data rates: 32, 48, 56, 64, 128, 192, 256 or 384 kbps
- Selectable interface: V.35, RS-530, V.36/RS-449 or X.21
- DCE, DTE1 or DTE2 clocking options
- Independent parameter selection for each channel
- End-to-end control signal transfer
- Enhanced diagnostics
- The KHS.1 is a high-speed data module providing two high-speed synchronous data channels for the Kilomux system. Parameters can be programmed independently for each channel. Each channel can be configured for V.35, RS-530, V.36/RS-449 or X.21 operation.
- The data rate for each channel can be selected for 32, 48, 56, 64, 128, 192, 256 or 384 kbps.
- Programmable timing modes and built-in elastic buffers enable connection for all types of digital lines, including digital data services, ensuring data integrity.
- One control signal per channel may be transmitted end-to-end for handshaking purposes. Typical end-to-end delay is 2.5 msec.
- Comprehensive diagnostic capabilities reduce downtime to a minimum. Diagnostics include V.54 loopbacks, initiated via connector pins or by the user, and built in BERT test initiated by the user. Automatic self-test is performed during power-up and normal operation.
- Each channel terminates on a 25-pin D-type, female connector. Pin-out assignment is according to EIA RS-530 specifications. Local support of four control signals is provided. For connection to V.35, V.36/RS-449 or X.21 equipment, special cables are available (see *Ordering*).

KHS.1

2-Channel High Speed Data Module

SPECIFICATIONS

- Number of Channels**
Two, synchronous
- Interface**
V.35, RS-530, V.36/RS-449 or X.21
- Connectors**
Two 25-pin D-type, female
Cables are available for connection to V.35, V.36/RS-449 or X.21 physical connectors
- Pin Assignment**
Per EIA RS-530
- Bandwidth Allocation on Main Link**
Selectable, according to the programmed channel data rate
- Data Rates**
32, 48, 56, 64, 128, 192, 256 or 384 kbps
Note: Certain KHS.1 channel data rates are not supported by some of the Kilomux main link data rates. *Table 1* details the compatibility of the KHS.1 channel with the main link data rates (in kbps).
- Data Clamp**
Mark hold on Out of Sync
- Control Signals**
Local support:
RTS-CTS delay soft controlled, DSR, DCD
End-to-end, selectable per channel:
RTS-DCD; 2.5 msec typical delay
- Clock Options**
DCE, DTE1, DTE2
- Diagnostics**
Independent for each channel
Soft controlled:
Local loopback
Remote loopback
Built in BERT test
Connector Pin Control:
Local loopback (V.54 Loop 3)
Remote loopback (V.54 Loop 2)
Auto self-test upon power-up and during normal operation
- Indicators**
For selected channel: TX, RX, RTS and DCD on Kilomux front panel
For X.21 interface: Control and Indication replace RTS and DCD
- Configuration**
Programmable via front panel, terminal interface or Network Management System

ORDERING

KM-2000M-KHS.1
2-Channel High Speed Data Module

Cables

CBL-HS2/*/#
Adapter cable for KHS.1's DB-25 channel connectors. Converts to connector of type specified (separate cable is needed for each connector). Cable must be chosen to match the desired clock mode. Cable length is 2 m (6 ft).

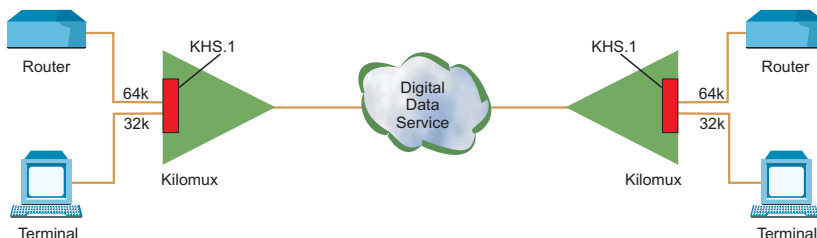
- * Specify interface, clock mode:
V1 for 34-pin V.35, DCE
V2 for 34-pin V.35, DTE1
V3 for 34-pin V.35, DTE2
R1 for 37-pin V.36/RS-449, DCE
R2 for 37-pin V.36/RS-449, DTE1
R3 for 37-pin V.36/RS-449, DTE2
X1 for 15-pin X.21, DCE (30 cm/1ft long)

- # Specify cable connector type (on user side):
F for female
M for male

Table 1

KML \ KHS.1	48	56	64	128	192	256	384	512	768	1024	1536
32	+	+	+	+	+	+	+	+	+	+	+
48		+	+	+	+	+	+	+	+	-	-
56			+	+	+	+	+	-	-	-	-
64				+	+	+	+	+	+	-	-
128					-	+	+	+	+	+	+
192						-	+	-	+	-	+
256							-	+	+	+	+
384								-	+	-	+

APPLICATION



data communications

www.rad.com

- International Headquarters**
24 Raoul Wallenberg Street
Tel Aviv 69719, Israel
Tel: (972) 3-6458181
Fax: (972) 3-6498250, 6474436
Email: rad@rad.com
- U.S. Headquarters**
900 Corporate Drive
Mahwah, NJ 07430
Tel: (201) 529-1100
Toll free: 1-800-444-7234
Fax: (201) 529-5777
Email: market@radusa.com

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