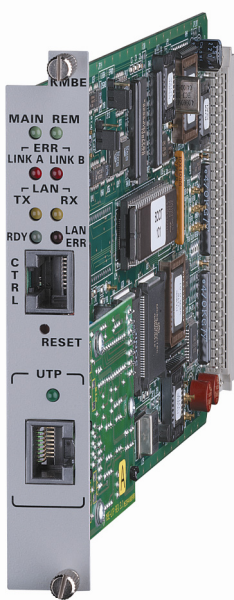


Kilomux-2100/2104

KMBE

Ethernet Router/Bridge Module



- Connectivity with two remote sites
- Solid Firewall (session-based) protection
- Single IP address translation
- Integrated SNMP agent
- Flash memory for software downloading

The KMBE Ethernet Router/Bridge module connects remote Ethernet LANs to a central Ethernet network via Kilomux main links. The LAN interface conforms to IEEE 802.3 and is provided with a UTP Ethernet (10BaseT) interface.

Communication between the KMBE modules is over the Kilomux main link. Data rate used by KMBE can be selected from 9.6 to 1280 kbps.

Connection between the LANs is established by operating KMBE modules opposite each other, one connected to the main (central) LAN and the other connected to the remote LAN (see *Figure 1*). When used with Kilomux-2100, KMBE can also operate simultaneously opposite both links in dual-link applications, enabling Ethernet connectivity with two remote sites (see *Figure 2*).

Provides Ethernet LAN
connectivity via
Kilomux main links



KMBE

Ethernet Router/Bridge Module

BRIDGING MODE

KMBE operates as a MAC level remote bridge, performing filtering and forwarding of only those packets that are addressed to the remote stations. Up to 80 remote and central LAN stations are supported.

KMBE implements the physical and data link layers of the OSI model. Bridging is completely transparent to higher-level protocols, such as TCP/IP, DECNET, XNS, ISO, as well as to operating systems such as NetWare and VINES.

Filters based on user-defined masks improve WAN utilization by ensuring that only necessary packets are transmitted over the WAN.

ROUTING MODE

IP and IPX calls can be routed over PPP. Router links can operate opposite any PPP-compliant device, including third party routers, or any standalone MBE device.

IPX can also be routed over Frame Relay. KMBE employs Frame Relay protocol with up to 30 DLCIs.

The Single IP address translation feature allows a small or medium office LAN to connect to the Internet using a single, dynamically or statically allocated IP address from the central access router.

An integral Solid Firewall protects an office LAN from undesired entry from the Internet, using session-based firewalling.

CONTROL

KMBE operation is fully automatic, and includes serial link start-up and recovery, as well as insertion and removal of remote workstations.

Quick setup, configuration and monitoring can be performed from an ASCII terminal connected directly to the KMBE control port, or via Telnet over LAN or WAN.

An SNMP agent provides inband or out-of-band management by RADview or any other standard SNMP management station.

Software downloading via the control port is available using XMODEM, and via LAN or WAN using TFTP. Product configurations and software are saved in Flash memory.

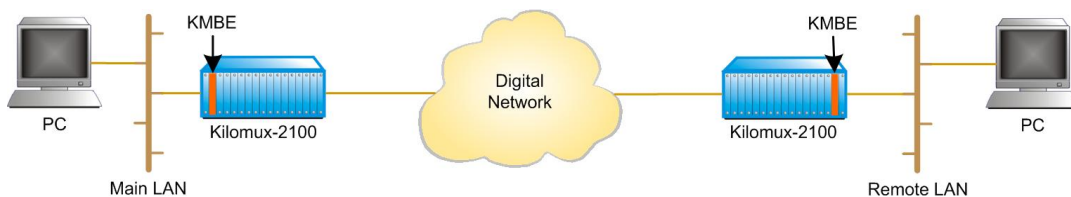


Figure 1. Point-to-Point Bridging

Specifications

LAN INTERFACE

Standard

IEEE 802.3

Type

10BaseT (UTP) with RJ-45 connector

CONTROL PORT

Interface

RS-232/V.24

Connector

RJ-45

Data Rates

1.2 to 9.6 kbps

Data Format

8 bit, no parity

GENERAL

Bandwidth Allocated on Kilomux Main Link

9.6 to 1280 kbps

Data Buffer Size

256 kbytes

Protocol

HDLC-based

Panel Control

Reset pushbutton

Power Consumption

See *Table 1*

Table 1. Power Consumption

Voltage [V]	Current [mA]	Power [W]
+5	500	2.50
+12	80	0.96
+12	-	-
Total	580	3.46

Indicators

MAIN (green) – Lights when KMBE is configured for connection to main LAN

REM (green) – Lights when KMBE is configured for connection to remote LAN

LINK ERR (red) per link – Flashes when the relevant main link between the local and remote KMBE is disconnected; Lights momentarily when an error is detected on a packet received from the relevant link.

LAN TX (yellow) – Lights momentarily when packets are transmitted toward the LAN

LAN RX (yellow) – Lights momentarily when packets are received from the LAN

RDY (green) – Lights when KMBE is ready to forward packets; flashes when KMBEs are synchronized but no workstation has requested insertion

LAN ERR (red) – Lights momentarily when an error is detected on the LAN interface

UTP (green) – Lights when 10BaseT interface is connected to the LAN

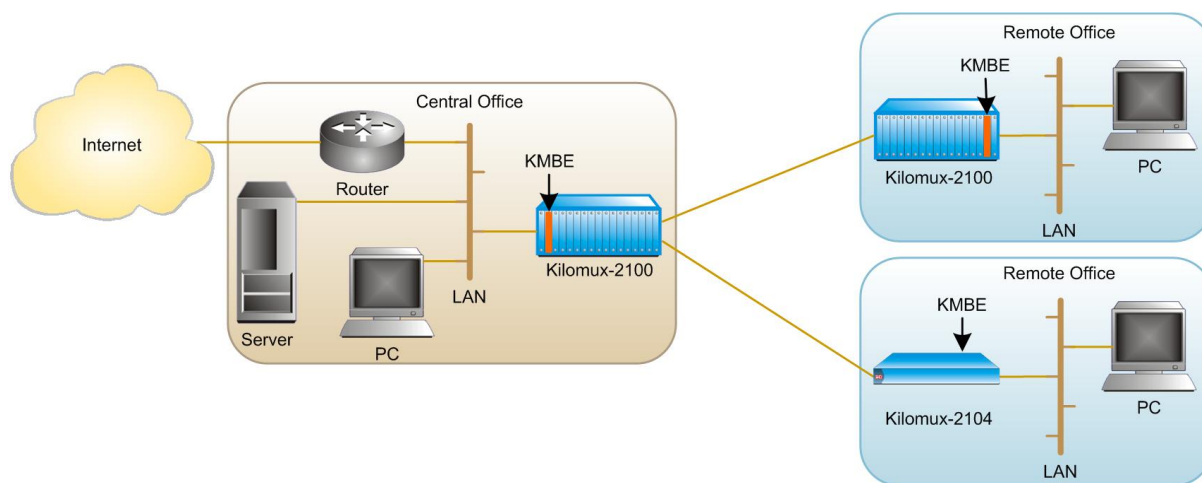


Figure 2. Dual Link Routing Application Connecting Two Remote Sites

KMBE

Ethernet Router/Bridge Module

Ordering

KM-2100M-KMBE/UTP

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