



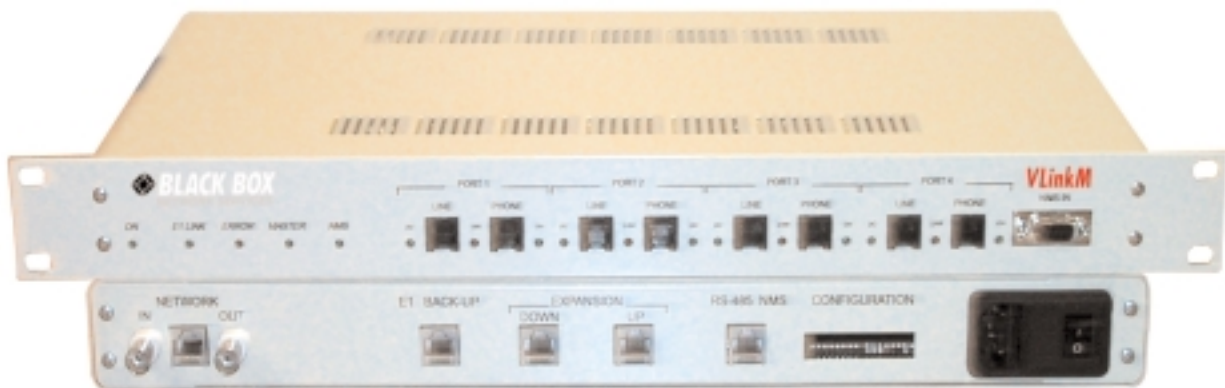
BLACK BOX[®]

NETWORK SERVICES

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VLinkM



POTS extension over an E1 line

Key Features

- ▶ **Modular system seamlessly upgradeable from 4 to 30 POTS port over a single E1 line**
- ▶ **Standard G.711 PCM codecs mapping voice channels into 64 Kb/s time slots**
- ▶ **FXS and FXO supported connections**
- ▶ **DC line voltage and off hook detection LEDs on each port**
- ▶ **Plug & Play. No need for specific configuration**

The new Black Box VLinkM is a modular access system that gives up to 30 POTS (Plain Old Telephone System) interfaces mapped directly from a single E1 line. Its primary use is intended for extending analogue PSTN or PABX lines to remote sites through any E1 transmission system (xDSL, RF Wireless, Fibre Optics, Laser etc....)

By using G.711 standard high quality PCM codec's, the VLinkM maps analogue voice channels into 64 Kb/s time slots of a G.704 frame on an E1 line.

POTS ports are provided with both FXO and FXS connectors so the user can plug any handset, analogue PSTN line or PABX extension line without specific configuration. Only internal jumper settings are needed for specific line impedance configuration. Only internal jumper settings are needed for

specific line impedance configuration according to country regulations when plugged into a PSTN Switch

The Black Box VLinkM has been specially designed to work in a point to point configuration providing virtual analogue channels between Port X in site A and same Port X in site B (see figure). When connecting two handsets to the same POTS port in both ends, the VLinkM provides you a permanent analogue voice channel. When someone picks up the phone, the VLinkM generates a corresponding RING signal on remote site acting as an intercommunication for point to point conversations. When connecting a handset to one site and a PSTN or PABX extension line on the other site, the VLinkM provides you an analogue extension by just passing from end to end all CO signaling and

voice traffic.

The Black Box VLinkM also supports data transmission when connecting PSTN or Leased Line modems to POTS ports. High data rates and best quality are guaranteed by using PCM codecs without any compression.

The VLinkM implements an efficient and proprietary signaling protocol between both sites in order to make the system directly pluggable into any handset, PABX or PSTN switch worldwide. This protocol mapped in TS16 is responsible for transferring any PABX or CO signaling information and voice traffic between both ends. It does not matter if you're using pulse or DTMF dialing or your cadnce parameters on your RING signal.

The VLinkM is a modular system that can be seamlessly upgradeable from 4 to 30 POTS ports over a single E1 line. By

using intelligent bus extensions, you just plug any additional device and the system automatically detects it and maps its ports to free unused time slots in E1 frame.

The VLinkM can also be integrated into the ViewLink

SNMP Management System providing useful information about call statistics and logs.

Ordering Information

ITEM	CODE
VLINKM POTS Extender 230VAC.....	MXU430P

For optimum performance order:

G.703 Cables

Duplex G.703 Cables (Siamese) 2-m.....ETNU703-2M

Duplex G.703 Cables (Siamese) 3-m.....ETNU703-3M

Duplex G.703 Cables (Siamese) 5-m.....ETNU703-5M

75 ohm TYPE 43 to BNC adaptor cables, 1.8-m
.....EVUT43-0006

75 ohm TYPE 43 to BNC adaptor cables, 3-m
.....EVUT43-0010

Specifications

G.703 Interface

Frame Format: ITU G.704 - PCM31, PCM31C, PCM30, PCM30C

Jitter: G.823

Line Code: HDB3 or AMI

Clock Speed:
2.048 Mbps +/- 50ppm

Clock: Internal, External or Slave

Connectors:
75 ohm BNC's unbalanced or 120 ohm RJ45 Balanced

POTS Interface

Connection: FXO and FXS

Encoding: 64Kbps Pulse Code Modulation (PCM) as per ITU G.711

Ring Signal: 70V rms@25Hz

Connector: RJ11

Cadence: extracted from PABX or PSTN switch

Dialing: pulse and DTMF supported

Indicator LEDs

ON: Power On

E1 LINK: Signal detector on

Network port

ERROR: Error at link level

MASTER: Master working mode

NMS: NMS traffic in process

Port Indicator LEDs

48DC: 48DC line voltage detected on POTS port

ERR: Configuration error in port

OH: Off hook detection on POTS port

Power

Internal 230VAC@25W

iPower: 4Wo

Dimensions

1U 19" Rackmount case (Width: 483mm x Depth: 209mm x Height: 44mm)

Temperature

i0-60 degrees centigrade