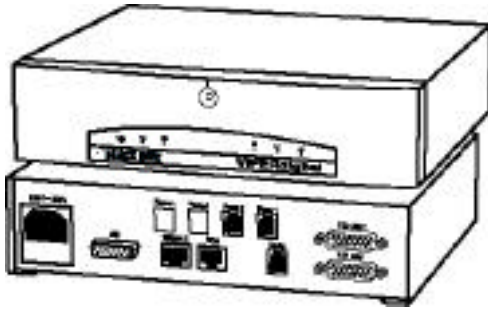


VIPERdigital



*Today's way to
integrate voice and
data.*

Key Features

- ▶ Voice and data integration on low-cost digital circuits
- ▶ ITU standard G729A, 8000-bps voice compression
- ▶ BRI/PABX connection
- ▶ PABX networking (QSIG, Q931, DPNSS)
- ▶ Voice over IP on WAN, LAN or Internet
- ▶ Integral IP/IPX router platform
- ▶ Optional WAN interfaces for ISDN, Frame Relay or Leased Lines.

Overview

The Black Box VIPERdigital is one-box voice and data solution which integrates multi-channel digital voice, LAN routing and networking over ISDN, leased or Frame Relay circuits. VIPERdigital seamlessly integrates up to 10 digital telephony channels with a fully featured IP/IPX LAN/WAN router providing significant savings in initial capital costs, ongoing communication charges and management and administration expenditure.

The VIPERdigital is an integrated solution eliminating the cost and inconvenience of maintaining separate voice and data networks by using one "pipe" for both. The VIPER ensures voice QoS (Quality of Service) by fragmenting IP packets and prioritising the voice. This is difficult to guarantee in other voice over IP products which do not have an integrated router.

VIPER single-box integration reduces capital costs by removing the

need for separate router and voice units, provides ongoing savings in line rentals through converged networking as well as reduced installation, maintenance, support and administration.

The digital voice connections on the VIPER eliminate the losses and interference possible with analogue voice connections. Standardised digital BRI and PRI interfaces and their associated protocols ensure maximum compatibility and reliability. A single multi-channel PRI connection eliminates the multiple interfaces and cables required with analogue interfaces all contributing to the quality of the VIPERdigital solution.

Technically Speaking

Many companies today use fractional PRI circuits for PABX networking, possibly using a MUX to allow data from a router to share some of the bandwidth. This is an inflexible solution requiring multiple units with expensive and inefficient permanently allocated bandwidth. A solution with 10 voice channels plus 128K for data would require a 768K fractional PRI link. An equivalent VIPER solution would require only a 256K link resulting in a significant saving in recurring line rental costs. It would also allow 150 k-256 kbps for data depending on the number of active voice channels.

VIPER units networked together acts as a distributed exchange allowing multi-channel PRI connection at the central site with a mix of BRI, DC5/AC15 or even standard POTs phones at the remote site. VIPER networking converts the different interfaces and protocols.

VIPERdigital incorporates ITU G.729A voice compression at 8 Kbps, which with silence compression and comfort noise generation allows a reduction to less than 1 kbps during pauses in the speech. The standards based header compression scheme ensures that the voice packets occupy only 9600 bps of the WAN bandwidth. Automatic fragmentation of data packets where necessary and prioritisation of the voice ensures the quality of service (QoS) aspects needed for voice.

VIPER incorporates an IP/IPX router with multiple interfaces including a 10BASE-T port for LAN connection, ISDN BRI and serial synchronous WAN connections for Frame Relay and leased access, plus a serial port for HDLC pass-through. The ISDN BRI can be used for 128K dialup connectivity or for top-up/backup on a leased circuit. The PABX connection is via a multi-channel BRI/PRI interface.

The Complete Package

- VIPERdigital
- User Guide

Specifications

Speed - Up to 2 Mbps aggregate

Line Type - Leased, ISDN

Protocols - LAN: IP, IPX™,

WAN: PPP, MLPP, Frame Relay;

PABX: QSIG/Q931

Voice/Fax - G.729: 8 kbps;

CS-ACELP silence suppression and compression;

Fax relay at 2400-14400 bps

PABX Interface - 10-channel PRI; 4-channel BRI

Connectors -

Data:

Console: (1) RJ-11;

ISDN: (1) RJ-45;

10BASE-T: (1) RJ-45;

AUI: (1) DB 15

PABX interface:

ISDN (BRI): (2) RJ-45; (ISU9901-BR14);

ISDN (Fractional PRI): (1) RJ-45; (ISU9901-PRI10);
WAN options:
X.21: (2) DB15;
V.24: (2) DB25;
V.35: (2) DB25 (requires adaptor cable)
Indicators - (7) LEDs: Power;
Ethernet Status: TX, RX;
ISDN: B1, B2;
WAN: Link1, Link2
Power - 230 VAC, 50 Hz (115 VAC, 60 Hz available on request)
Size - 6H x 22.5W x 19.5D cm
Weight - 1.8 kg

Ordering Information

Product Name	Code
VIPERdigital	
with BRI PABX Connection	ISU9901-BR14
with PRI PABX Connection	ISU9901-PRI10
<i>For additional interfaces, order:</i>	
WAN Options (Dual Interface Cards)	
X.21 Interface	ISU9902-X21
V.24 Interface	ISU9902-V24
V.35 Interface	ISU9902-V35