ViNE2404a - ATM

Voice Integration at Network Edge

VINE2404a-ATM
The modular ViNE2404a-ATM is an “all-in-one” voice and data unit for the SME business market. It provides a standard G.SHDSL interface with 4 POTs ports. The unit can sit in front of a PBX or operate as a stand-alone unit with direct connection to analogue telephony devices. The ViNE2404a-ATM delivers up to 4 derived voice channels together with firewall, router, USB and Ethernet functions.

Applications
The ViNE2404a-ATM offers separate and additional lines for Internet or business fax and voice traffic. The unit easily connects to a PBX with seamless availability of features, or analogue telephony devices can be connected directly into the voice ports. Up to 4 simultaneous broadband voice channels are made available over one G.SHDSL connection together with high-speed data services. Intelligent codec management ensures maximum bandwidth efficiency, providing valuable revenue streams for the service provider.

In conjunction with an voice gateway or switch, the full range of supplementary services can be reproduced. The lines and services can all be remotely provisioned, configured and maintained.

Flexibility
All ViNE Integrated Access Devices (IADs) are pre-configured to a standard customer profile but with an element management system, specific user requirements can be managed centrally, during installation or by the end user through restricted web based access.

Remote upgrade and management capabilities mean all ViNE products offer a fully scalable route to future IP centric softswitch architectures and services. Full support is provided for remote management as well as DSL Forum 'Auto-config' (TR-037) protocol. Voice interop with the major gateway and softswitch suppliers is provided, the ViNE2404a-ATM supports both proprietary as well as industry standards.

Quality of Service is delivered by a range of different options including VC traffic shaping on AAL2 and AAL5. With the integrated DSL modem, the G.SHDSL connection allows up to 2.3Mb downstream and 2.3Mb upstream via either the self-sensing USB (Plug and Play) or the Ethernet data interface. Using dynamic bandwidth allocation with adaptive traffic shaping, data fragmentation and voice compression, the ViNE2404a-ATM ensures that the optimum data throughput is guaranteed without impacting on the

Features

Key Benefits
- G.SHDSL modem, voice & router
- Annex A and B (auto-sensing)
- VoDSL (ATM) voice
- 4 POTs ports
- extensive inter-op experience
- full QoS management
- G.SHDSL.bis ready

Data & CLASS Services
- up to 2.3Mb Downstream
- up to 2.3Mb Upstream
- CLI Support
- CLASS feature support
- Ethernet / USB / router / firewall

Open Standards
- ATM Forum LES to VMOA-0145
- ELCP CCS and CAS
- wide DSLAM Interoperability

Cost Engineered Design
- Universal G.SHDSL WAN
- 10/100 BaseT Ethernet interface
- USB V1.1 LAN interface
- Business class router & bridge
- Integrated Software on Silicon
- Integrated web server
- SNMP, Telnet, HTTP remote mgt.
- Local management via service port
- Remotely upgradeable

Business Class Security
- Stateful inspection firewall
- IP filtering, PAP, CHAP
- NAT, NAPT (PAT)

DATAFLEX

Hardware Interface
- WAN interface: G.SHDSL (RJ11)
- LAN interface: 10/100 Base-T Ethernet (RJ45), USB V1.1
- Self-sensing USB or Ethernet operation
- Telephony interfaces: 4 POTs ports
- Service: V.28 (RJ45) for service engineers only

Telephony function (POTs)
- Compatible with TBR21 compliant equipment
- RJ11 connection
- DTMF and loop disconnect dialling
- Line reversal signalling
- REN=4 on each port
- CLASS feature support
- Configurable ring frequencies and cadence
- Ring signal: 35V=rms, sinusoidal (on-hook)
- On-hook battery voltage: 48V
- DC loop current: 25mA current source (off-hook)
- Impedance: 600ohm or euro (TBR21) model

Codec and Packetisation support
- Echo cancellation: G.168, 32ms
- Silence detection and comfort noise generator
- Fax and modem detection
- DTMF detection and generation
- Variable length dynamic jitter buffer
- 64 Kbps PCM (G.711)
- 16 or 32 Kbps ADPCM (G.726)
- A-Law, U-Law

Encoding and line speed
- G.SHDSL (G.991.2, G.991.bis) Annex A and B (auto-detect)
- Line speed: from 128Kbps to 2304Kbps (per line)

Voice protocols
- ATM Forum LES to VMOA-0145
- ELCP CCS and CAS
- Jetstream LES certified

Quality of service
- ATM: CBR, rt-VBR, nrt-VBR, UBR, UBR+
- VC traffic shaping on AAL2 and AAL5

Environmental
- Operating temperature: 0º C to +40º C
- Power supply: external, 110 - 230Vac, 50 - 60Hz
- Power: 8watt nominal, 10watt maximum
- LEDs: Voice , DSL, LAN, Data, Power
- Dimensions: 200 x 30 x 172mm
- Weight: 0.5kg

Data
- Bridged and routed Ethernet encapsulation (RFC 1483): LLC/SNAP, VcMux, HDLC
- DHCP server, relay and client
- Point-to-Point Protocol (PAP/CHAP Authentication)
- PPP over Ethernet gateway
- PPP over ATM gateway (RFC 2364): LLC/SNAP, VcMux, HDLC
- PPP over Ethernet pass-through
- PPP over Ethernet over ATM
- IP over ATM

Routing
- Numbered or unnumbered WAN interface
- Up to 16 LAN subnets with DHCP server associations plus virtual interfaces
- RIP1 and RIP2 static routes
- NAT, NAPT (PAT)
- IP multicast forwarding, IGMP V1 and V2
- DHCP server, relay and client
- DNS proxy and relay
- Transparent bridging option

Configuration and Management
- Ethernet, service port (service engineers only)
- Embedded web server
- Command Line Interface (local or via Telnet)
- Password protection
- Radius client support for authenticating system configuration access
- SNMPV.2
- Firmware upgrade: HTTP, TFTP, FTP
- ICMP ping, system log, TFTP, Traceroute
- ILMI, UNI4.0 and F5 OAM

Regulatory
- CE Mark
- EN55022 for emissions
- EN55024 for immunity
- EN60950: 2000

Security
- Built-in stateful inspection firewall: IP filtering
- NAT / NAPT
- password access for local / remote configuration
- restricted IP access (for management)

Dataflex
Dataflex Design Communications Ltd
Connect House
Kingston Road
Leatherhead
Surrey, KT22 7LT
United Kingdom

Tel: +44 (0)1372 384130
Fax: +44 (0)1372 384131

Email: sales@dataflex.com
Website: www.dataflex.com