

ViNE1102a - ATM



Voice Integration at Network Edge

VINE1102a-ATM

The modular ViNE1102a-ATM is an “all-in-one” voice and data unit for the residential or SOHO markets. It provides a standard ADSL interface with 2 POTs ports and can operate as a stand-alone device or in front of a mini key-system. The unit delivers up to 2 derived voice channels together with firewall, router, USB and Ethernet functions.

Applications

The ViNE1102a-ATM offers separate and additional lines for Internet or business fax and voice traffic. The unit easily connects to a mini key-system with seamless availability of features, or analogue telephony devices can be connected directly into the voice ports. Up to 2 simultaneous broadband voice channels are made available over one ADSL connection together with high-speed data services. In conjunction with a voice gateway and 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 ViNE1102a-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 ADSL connection allows up to 8Mb downstream and 1Mb 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 ViNE1102a-ATM ensures that the optimum data throughput is guaranteed without impacting on the simultaneous voice calls.

Features

Key Benefits

- Fallback to PSTN
- ADSL (Annex A or B)
- voice & data router
- VoDSL (ATM) voice
- 2 POTs ports
- extensive inter-op experience
- full QoS management
- ADSL2 / 2+ ready

Data & CLASS Services

- up to 8Mb Downstream
- up to 1Mb Upstream
- up to 24Mb Downstream (ADSL 2+)
- 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 ADSL 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, NAT (PAT)



Hardware Interface

- WAN interface: ADSL (RJ11)
- LAN interface: 10/100 Base-T Ethernet (RJ45), USB V1.1
- Self-sensing USB or Ethernet operation
- Telephony interfaces: 2 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

- ADSL (G.992.1 Annex A or B), G.992.2 (G.Lite ADSL) G.994.1 and T1.413
- Line speed: up to 8.192Mbps downstream and 1.024Mbps upstream (ADSL)
- ADSL 2 / 2+ support up to 24Mbps downstream

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

Security

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

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

Environmental

- Operating temperature: 0° C to +40° 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: 0.45kg

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