

# ViNE2000 V3 Series



“Multi Service Access Gateway delivering  
POTS, BRI, PRI VoIP, Data & DSL”



## Product Variants:

### DSL Options

ViNE24xxx:	SHDSL
ViNE28xxx:	Dual SHDSL
ViNE21xxx:	ADSL

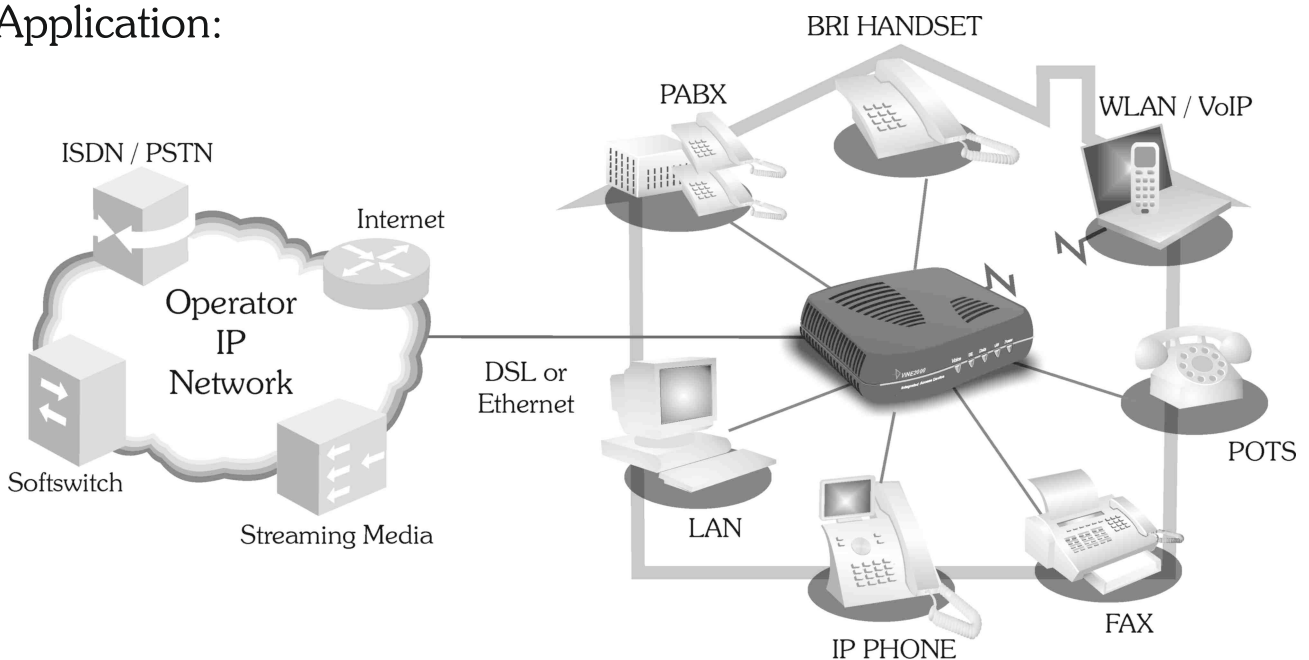
### Voice Options

ViNE2x02b:	4x ISDN (BRI)
ViNE2x04a:	4x POTS (FXS)
ViNE2x04b:	4x ISDN (BRI)
ViNE2x06a:	6x POTS (FXS)
ViNE2x06b:	6x ISDN (BRI)
ViNE2x06m:	4x POTS (FXS) + 2x ISDN (BRI)
ViNE2x08a:	8x POTS (FXS)
ViNE2x08b:	8x ISDN (BRI)
ViNE2x08m:	4x POTS (FXS) + 4x ISDN (BRI)
ViNE2x12a:	12x POTS (FXS)
ViNE2x12m:	8x POTS (FXS) + 4x ISDN (BRI)
ViNE2x30p:	1x PRIMARY RATE INTERFACE
ViNE2x60p:	2x PRIMARY RATE INTERFACE

## Key Features:

- ADSL/2/2+ / SHDSL / Dual SHDSL modem/router with integrated POTS, BRI and PRI VoIP gateway.
- DSL, 3G Wireless or Ethernet WAN
- Provides ‘equivalent’ voice service over broadband / VoIP
- Provides POTS, BRI, PRI or combinations
- Comprehensive ATM and IP QOS
- Target market segment:
  - SME
  - Enterprise
- Remote management & provisioning
  - TR-069
  - Telnet / SSH / HTTP / HTTPS / FTP
  - SNMP
  - Broadsoft Device Manager
- Stateful inspection firewall
- Extensive interop experience
- RTCP-XR VoIP Call Quality Metrics
- Integrated SIP proxy enabling Centrex and

## Application:



# Specifications:

# ViNE2000 V3 Series

## Network Interfaces

- SHDSL (V24xxx) RJ11
- up to 2.3 Mbps up/downstream
- G.991.2 (G.shdsl)
- Dual SHDSL (V28xxx) RJ11
- up to 4.6 Mbps up/downstream
- G.991.2 (G.shdsl)
- ADSL/2/2+ (V21xxx) RJ11
- up to 24 Mbps downstream
  - up to 3.072 Mbps upstream
  - G.992.1 (G.dmt)
  - G.992.2 (G.lite)
  - G.992.3 (G.dmt.bis) ADSL2
  - G.992.5 ADSL2+
- Ethernet 4xRJ45
- Configurable WAN or LAN
  - 10/100baseT/TX
  - Auto MDI/MDIX

## Telephony Interfaces

- POTS FXS RJ11
- DTMF and loop disconnect dialling
  - REN of 4
  - CLASS features
- Configurable:
- Impedance: Complex or Resistive
  - Line reversal states
  - Ring frequency & cadence
  - Ring voltage = 50V nominal
  - On-hook batt. Voltage = 48V
  - DC loop current = 25mA
- ISDN2/BRI S0 RJ45
- CTR3 compliant
  - NT mode + TE mode (optional)
  - Point to point & point to multipoint
  - 100 ohm termination
  - Power source 1 support (NT)
  - Supplementary service support

- ISDN30/PRI RJ45
- 120 Ohm Balanced
  - E1: I.431 & CTR4 compliant
  - T1: ANSI T1.403
  - NT & TE mode
  - Supplementary service support

## USB Master : 3G

- USB Master providing 3G WAN
- DSL backup over 3G
- Routing and Physical fail over

## Voice Protocols

- MGCP: NCS, RFC2705, 3435
- SIP: RFC 3261, 2453
- Single port registration
  - Trunking
    - Multiple device registration
    - Single device registration
    - No registration
    - POTS trunking
  - Local SIP proxy (optional)
  - Local dial plan

## VoIP Codecs

- G.711 a-law, u-law, 64 kbps
- G.726/G.721 ADPCM, 32 kbps
- G.729ab CS-ACELP, 8 kbps
- G.168 echo cancelling
- Silence detection
- Comfort noise generation
- DTMF detection and relay
- Fax and modem detection
- T.38 fax relay
- Variable length dynamic jitter buffer
- Packet loss concealment (PLC)
- RFC 4040 - Clear mode (ISDN only)

## Data

- 8 ATM PVC on DSL WAN
- Bridged and routed encapsulation - RFC 1483
- LLC/SNAP, VCMux, HDLC
- MER (Mac Encapsulated Routing)
- PPPoH, PPPoA, PPPoE, PAP, CHAP
- IPoA - RFC 2225
- VLAN termination

## Routing

- Up to 16 LAN subnets with DHCP server association
- RIP v1/v2
- NAT, NAPT (PAT)
- BGP
- IP Multicast forwarding
- IGMP v1/v2 & proxy
- DHCP server, client, relay
- DNS server, client, relay
- Dynamic DNS client
- Transparent bridging
- STUN
- Policy Based Routing (PBR)

## Quality of Service

- ATM: CBR, VBR-rt, VBR-nrt
- UBR, UBR+
- ATM VC traffic shaping
- IP: TOS/DSCP bit prioritisation
- VLAN tagging
- Diffserv
- Packet classifier and metering
- Transmit scheduler
- Algorithmic dropping
- RTCP (RFC3550)
- RTCP-XR (RFC3611)

## Configuration & Management

- HTTP, HTTPS, Telnet, SSH, SNMP
- Local or remote access
- Firmware upgrade HTTP(S), TFTP, FTP
- ICMP Ping, Syslog, Traceroute
- TR-069, TR-098, TR-104, TR-111
- Broadsoft device management

## Security

- IP filtering
- NAT/NAPT
- Password access
- Configurable access controls
- Stateful inspection firewall
- DOS protection
- IPSec termination and initiation

## VPN Services

- LAN-to-LAN and teleworker-to-LAN
- Manual keys
- Authentication: Null, MD5 and SHA-1
- Internet Key Exchange (IKE) authentication: pre-shared key, Digital Signature Algorithm (DSA) and Rivest, Shamir and Adleman (RSA)
- Hardware-accelerated Triple Data Encryption Standard (3DES)/Data Encryption Standard (DES) and Advanced Encryption Standard (AES)

## Mechanical

- Unit Size: 200 x 55 x 172 mm
- Boxed Size: 290 x 250 x 100mm
- Boxed Weight: 1.4 kg

## LED Indicators

### FRONT:

- Power, DSL, DSL2, LAN, Voice, UM1 (varies according to product)

### REAR:

- LINK/DATA for each LAN port.
- Layer 1 status for each BRI/PRI Port.

## Environmental

- Operating temp. 0 to 40°C
- Storage temp. -10 to 60°C
- 5 - 95% Relative Humidity

## Regulatory

- CE marked
- RoHS compliant
- Safety: EN60950
- RFI: Emissions: EN55022
- RFI: Immunity: EN55024

## Power

- AC/DC Adapter
- 110/230Vac - 12Vdc 24W max