

Venus 2904  
 Venus 2908  
 Venus 2916  
 Venus 2924  
 Venus 2932

# VoIP Gateway

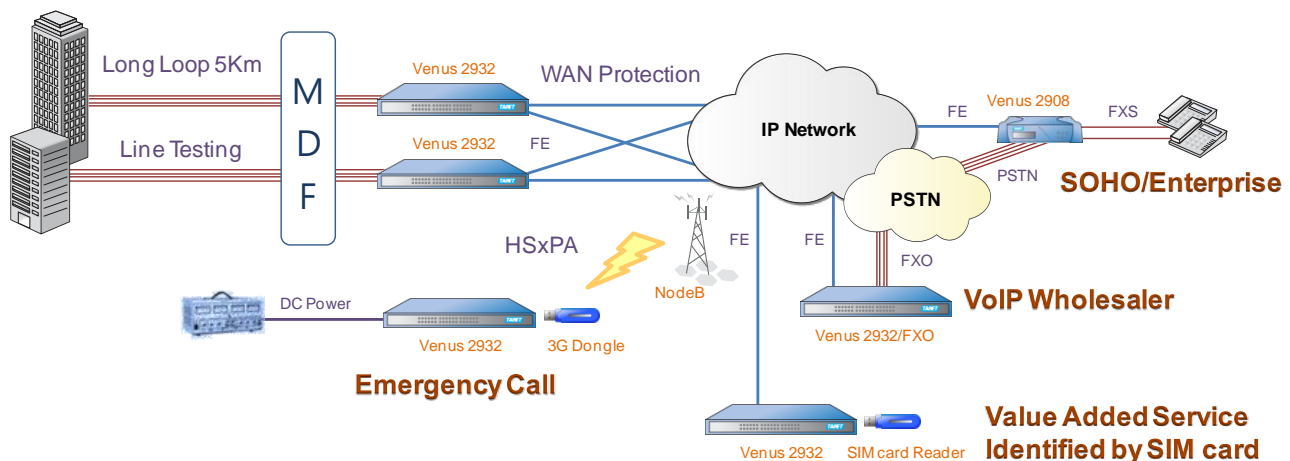


- Selectable in SIP, MGCP and MEGACO protocol
- TLS advanced security features
- Support 3GPP SIP features
- Long reach up to 5 Km
- GR-909 Line test function
- Interactive Voice Response (IVR)
- Auto Provision feature with encryption
- Dual WAN-links for protection (Venus 2904/2916/2924/2932)
- USB port for redundant WAN backup through wireless 3G Dongle (Venus 2904/2916/2924/2932)
- T.30 and T.38 compliant
- Line reversal and metering tone (12K/16KHz)
- Ethernet switch function with QoS and VLAN
- Advanced calling features, 3-Way Conference with/without media server, call parking and more
- WEB GUI for ease of configuration
- SNMP and TR-069 supported
- IPv6 support\*

The brand new Venus 29xx Series analog VoIP gateways are feature-rich and cost-effective products designated for telecom operators to provide telephony services with security-enhanced capabilities in the modern complex networks.

The Venus 29xx Series VoIP Gateway empowers service providers delivering carrier-class IP Centrex service over a Total-IP NGN / 3GPP IMS infrastructure in a more secured way. With SRTP (Secured Real-Time Protocol) and TLS features, the voice transmission is secured with better protection against the interferences on the Internet.

The Venus gateway provides a connection platform between traditional POTS lines and the Internet. Over various broadband technologies including xDSL, HFC, wireless and fiber, the Venus 29xx Series carries toll quality voice, fax and data traffic simultaneously in a cost effective way. In addition, the Venus 29xx Series supports intelligent features like long loop, line testing, polarity reversal, caller ID, call transfer, call waiting and 3-way calling. The ideal applications include MTU/MDU, virtual PBX, IP Centrex, PBX extension and hosted telephony services.



## Model

- Venus 2904, 4S: 4 FXS, 5 Ethernet ports, 1 USB
- Venus 2904, 4S1P: 4 FXS, 1 PSTN, 5 Ethernet ports, 1 USB
- Venus 2904, 2S2O: 2 FXS, 2 FXO, 5 Ethernet ports, 1 USB
- Venus 2908v2, 8S: 8 FXS, 1 PSTN, 2 Ethernet ports, 1 USB
- Venus 2908v2, 4S4O: 4 FXS, 4 FXO, 2 Ethernet ports, 1 USB
- Venus 2908A, 8S: 8 FXS, 1 PSTN, 2 Ethernet ports, 1 USB
- Venus 2908A, 4S4O: 4 FXS, 4 FXO, 2 Ethernet ports, 1 USB
- Venus 2916: 16 FXS, 5 Ethernet ports, 1 USB
- Venus 2924: 24 FXS, 5 Ethernet ports, 1 USB
- Venus 2932: 32 FXS, 5 Ethernet ports, 1 USB
- Venus 2932O: 32 FXO, 5 Ethernet ports, 1 USB
- Venus 2932SO: 16 FXS, 16 FXO, 5 Ethernet ports, 1USB

## Call control protocol

- SIP (RFC-3261), MGCP 1.0/0.1/NCS1.0, MEGACO (H.248)
- Real-time Control Protocol (RFC-1889) & RTCP
- 3GPP SIP supported

## Voice Feature

- G.711(a/u law), G.723.1, G.726, G.729 a/b
- Voice Activity Detection (VAD)
- Silence Suppression
- Comfort Noise Generation (CNG)
- Adaptive Jitter Buffer
- Echo Cancellation (ITU G.165&G.168)
- Packet Loss Compensation
- Adjustable Gain Control
- RTP filter

## Analog Voice Port

- Telephone Interface: RJ-11
- In-Band DTMF, Out of Band DTMF Relay (RFC-2833)
- Pulse or DTMF dialing
- CLID: FSK-Bellcore 101/102, FSK-ETSI, DTMF, Blocking, Calling Name & Data, POTS CLID Detection
- DTMF Tone Detection & Generation
- Modem Relay
- Priority Reversal Detection (FXO) & Priority Reversal Generation (FXS) PSTN Cadence Auto Detection
- Metering Signaling Generation for Coin Phone(FXS)\*
- GR-909 Line test function

## Calling Features & Management

- Call Hold, Waiting, Transfer, Forward, Return & Park
- 3-Way Conference w/wo Media Server
- Configurable FLASH-HOOK Timing
- Deny Second Stage Dialing (FXO)
- DID (Direct Inward Dialing in FXO), DOD (Direct Outward Dialing in FXO), DND (Do Not Disturb)
- Internal Phone Book (SIP), Advanced Digit-Map
- Hot/Warm Line
- E.164 supported
- Interactive Voice Response (IVR)
- Ring Priority (Hunting, Simultaneous, Sequential)
- Call Interception
- Outbound Proxy Support
- Wildcard Register (By Group) / Line Register (By Port)
- Soft-switch Backup Mechanism Support
- Manipulation Dialing
- Video Message Waiting Indication (VMWI)
- Inner Dialing support (MGCP/MEGACO)
- Max. Concurrent Call Limitation: Summary/Incoming/Outgoing
- Outbound deny prefix number

## Data Features

- WAN: Static IP, PPPoE, DHCP/BootP Client
- LAN: Bridge / Router
- Static Routing Table
- NAT Pass Through, STUN
- Static NAT/NAPT Mapping
- DHCP Server
- DNS/DDNS
- IPv6\*

## Security

- SIP Authentication: MD5
- Media: Security RTP
- DoS prevention
- MGCP authentication: DH Key Agreement & MD5 Encryption
- Control: TLS\*

## QoS

- Port-Based VLAN/ 802.1Q VLAN-tagging
- DSCP/IP Precedence
- Guarantee VoIP Bandwidth

## System Management & Maintenance

- Console, Telnet, WEB (HTTP)
- Configuration Backup with Encryption
- Remote Firmware Upgrade (HTTP/TFTP/FTP)
- SNMP v1/v2
- Auto Provision (HTTP/TFTP/FTP)
- TR-069
- System Log / Call Log

## Certification

- ISO 9001
- CE Safety
- IEC 60950-1, 61000-4
- EN 55022, 55024, 61000-3

## Dimension

- Venus 2904: 200(W) x 150(D) x 39(H) mm
- Venus 2908: 245(W) x 200(D) x 60(H) mm
- Venus 2916/2924/2932: 442(W) x 287(D) x 44(H) mm

## Power

- Venus 2904: AC/DC, DC/DC external power adapter (12V, 1A)
- Venus 2908: External AC/DC power adaptor
- Venus 2916/2924/2932: Built-in AC or DC power
  - AC 110V ~ 240V, 50 ~ 60Hz
  - DC -36V ~ -72V

## Operating Environment

- Operational: 0°C ~ 50°C
- Storage: -10°C ~ 70°C
- Humidity: 10% ~ 90% (non-condensing)

## Weight

- Venus 2904: 380g
- Venus 2908: 960g
- Venus 2916/ 24/ 32: 3.2/ 3.3/ 3.4Kg