



Vood 200

IP Residential Gateways

With an optical fiber interface, the Vood 292 gateways are designed for business plans that call for higher numbers of separately controlled ports over a Fiber-To-The-Home (FTTH) uplink.



With FTTH ready to deliver multiple bandwidth-hungry services, your potential return can be multiplied by the number of separate ports serving your customer's home. That's what the 292 gateway is designed for.

The **Vood 292** is an advanced Ethernet switch with an optical fiber interface, 2 VoIP ports and 8 separately controlled Ethernet ports to the customer premises.

This gateway is designed for residential business models that call for higher numbers of LAN ports. With the **Vood 292**, providers can offer 8 separate channels for video, IPTV and Internet access in addition to two VoIP ports for toll-quality IP telephony/fax.

Each port on the **Vood 292** is controlled separately. Connection speeds, QoS and other service increments are simply toggled from your operations center. That means you can easily realize separate service revenues from each and every port with individualized entertainment for every consumer in a household.

Even under a full 8 channel load, the 292 can still balance latency-sensitive telephony and TV performance simultaneously. This is because the usual compromises between voice and video are dramatically reduced by Tilgin's unique approach to signal processing.

Dynamically enhanced voice quality

In addition to conventional QoS prioritizing, Tilgin has developed unique jitter & error concealment signal processing to further enhance voice quality by dynamically compensating for packet jitter. These solutions work in tandem, adapting dynamically to varying network performance, delivering consistently optimized voice quality under any traffic conditions.

Cost reducing central management

The Vood Centre Manager (VCM) offers Plug and Play CPE registration and provisioning as well as centrally controlled security and service management for mass-market CPE deployments. Over the lifetime of a subscription, gateways are re-provisioned with service level upgrades or support for new functionality automatically.

Gateways are managed in groups for effective handling of very large-scale gateway networks. Group folders are pre-defined for delivering specific service offers so upgrading a customer is just moving them to another folder. All gateway re-configurations are automatically executed at the next connection to the server.

The VCM gives you comprehensive control of service differentiation factors including QoS management per subscriber, per port and per service as well as advanced statistics, performance and helpdesk tools that can even detect faults in home wiring.

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Technical Specifications Vood 200

Model	WAN ports	LAN ports	VoIP ports	Wirespeed switching	QoS	Multicast support	Jitter control	Error conceal
Vood 292	1 fiber	8 Ethernet	2	100Mb/s	Yes	Yes	Yes	Yes

Connectors

- 2 x RJ-11
- 8 x RJ-45 fast Ethernet, fully compliant with the applicable sections of IEEE802.3, IEEE802.3u and IEEE802.3x. Automatic MDI/MDIX crossover for 100BASE-TX and 10BASE-T. The fourth bit is the VLAN CFI bit (Bit 12)
- 1 x LC (optical): 100Base-FX, 100Base X10 or 100Base-BX10
- D-Sub for UPS

Integrated Ethernet Switch

- Full non-blocking wire speed reception and forwarding
- Remote management support
- 10 / 100 Mbps auto-negotiation
- Auto MDI / MDIX
- Full / half duplex
- IGMP snooping
- Rate limitation
- Storm protection
- Filtering
- VLAN tagging / untagging
- VLANs: 64
- 4 QoS queues
- IEEE 802.1 p / q

Protocols

- DHCP
- NTP
- RTP / RTCP
- HTTP
- SNMPv2-MIB
- IF-MIB
- UPS-MIB
- IGMP v2 / v3
- SMTP

Telephony Protocols

Toll-quality voice and fax

- SIP, H.323, MGCP
- Local or network based service architecture
- Individual VoIP clients and phone numbers per port
- Tilgin Adaptive Jitter Buffer Algorithm
- Tilgin Error Concealment Algorithm
- UPnP (IDG 1.0)
- STUN

Speech Codecs:

- G.711 A-law & u-law (64 kbps)
- GSM 06.10 (13 kbps)
- G.723.1 (5.3 kbps, 6.3 kbps) – optional
- G.729AB (8 kbps) - optional
- Variable packet lengths
- DTX, Voice Activity Detector, Comfort Noise

Tilgin Voice Enhancements:

- Error Concealment (G.711 Annex I)
- Tilgin echo cancellation (G.168 compliant, variable tail length)
- Tilgin dynamic jitter buffering

Fax/modem:

- Fax/modem tone detection & fax adaption
- G.711 pass through
- T.38 (optional)

DTMF detection:

- According to ETSI ES 201235-3
- Fast DTMF detection & muting used with "out of band" DTMF signaling

Supplementary PSTN services

- Country specific configurations, e.g. line impedance, levels, tones and supplementary service codes, polarity reversal
- Call diversion, call hold & call waiting
- Message waiting, Inquiry call
- Call transfer (blind & consultative)
- 3-way conferencing
- Call forwarding unconditionally, when busy, on no reply, and after number of seconds
- Anonymous call reject
- US Mid Call service profiles
- Caller ID: DTMF and FSK standards ETSI, BT, CCA, Telcordia, TIA, Stentor, Telestra
- CLIR -Caller Line Identity Restriction
- CLIP -Caller Line Identity Presentation

Dial plan options:

- General & short number prefix
- Call blocking, Hotline & Warm line
- Four special short number series
- Smart dial

Voice services and control

- Web based control of services
- Phone book (10 short numbers)
- Call lists for dialed numbers, missed calls, and all calls
- Optional answering machine: (built-in, local storage of messages, user-recordable greeting message, messages can be forwarded to e-mail account as sound attachment)
- Unified Voice Mail: SMTP, wav-format (optional)
- Click to dial
- Prevent double Call Forwarding
- Intelligent PSTN B number routing
- Emergency call routing
- Fast re-dial

Other

- Power: 11 W
- Dimensions: 286mm x 138mm x 34mm (11.25" x 5.34" x 1.34")
- Weight: 0.65 kg (1.42 lbs)

Certifications:

- CE Mark, FCC Part 15 Class B, FCC Part 68
- IEC 60950, EN 60950, CSA 950

Management

Recommended: Vood Centre Manager (VCM)

VCM is a high end central manager for automation and streamlined handling of large scale gateway networks. VCM mass-management features include:

- PnP gateway registration
- Automated provisioning
- Service management
- CPE group management
- Helpdesk
- Statistics
- Network management
- Security management
- HW and software inventory
- Performance management
- Fault management
- Software management

Alternative: Web based management

- Basic configuration via analog phone
- CPE web-based graphical user interface