# 2-Port H.323 / SIP VoIP Gateway

With years of Internet telephony and router manufacturing experience, PLANET proudly introduces the newest member of the PLANET VoIP gateway family: the VIP-281/VIP-281FS.

The PLANET VIP-281 series VoIP Gateway is fully compliant with both SIP and H.323 standard residential gateways that provide a total solution for integrating voice-data network and the Public Switched Telephone Network (PSTN). The VIP-281/VIP-281FS not only provides quality voice communications, but also offers secure, reliable Internet sharing capabilities for daily voice and Internet communications.

With advanced DSP processor (TI) and cutting edge VoIP technology, the PLANET VIP-281 series are capable of handling both SIP and the H.323 calls. Up to 2 registrations to the SIP proxy or H.323 Gatekeeper, the VIP-281 series are able to make calls to either H.323 or SIP voice communication environment. The VIP-281 series are equipped with a 4-Port Ethernet switch and built-in NAT router function that provides Internet access using only one IP address. With these features, users may now enjoy high quality voice calls and secure Internet access without interfering with routine activities.

Meanwhile, the VIP-281 series are designed for comfort, ease-of-use with a sophisticated, and satisfaction from customers, the VIP-281 series not only inherits traditions of quality voice communications and real-time fax data over IP networks, but the VIP-281 series also eliminates the human resource VoIP network deployment. With optimized H.323/SIP architecture, the VIP-281 series are the ideal choices for P2P voice chat, ITSP cost-saving solution, but also provide network-converting feature to translate the packet network into traditional PBX system.

With built-in PPPoE/DHCP/DDNS clients, up to 2 concurrent connections in VIP-281 series, voice communications can be established from anywhere around the world. The VIP-281 series comes with intuitive user-friendly, yet powerful management interface (web/telnet), that can dramatically reduce IT personnel resource, and complete VoIP deployment in a short time, plus remote management capability, VoIP administrators can monitor machine/network status, or proceed maintenance/trouble-shooting service via Internet browser or telnet session.

Besides, it provides voice channels status display and optimized packet voice streaming over managed and public (Internet) IP networks.

## KEY FEATURE

### Network Features

**Network Address Translation (NAT)**
- NAT allows multiple PCs to connect to an Internet Service Provider (ISP) using a single Internet access account.

**Point-to-Point Protocol over Ethernet (PPPoE) Client Support:**
- If you are a DSL user, the router has a built-in PPPoE client for establishing a DSL link connection with the ISP. There is no need to install a further PPPoE driver on your computers.

**Smart QoS**
- The smart QoS provides stable voice quality while user access internet from private LAN to internet at    the same time. This device would start suppressing throughput automatically when VoIP call proceed and keep full speed access when there is no VoIP traffic.

**DDNS (Dynamic Domain Name Server)**
- DDNS is a service that maps Internet domain names to IP addresses. It allows you to provide Internet users with a domain name (instead of an IP Address) to access your Virtual Servers.
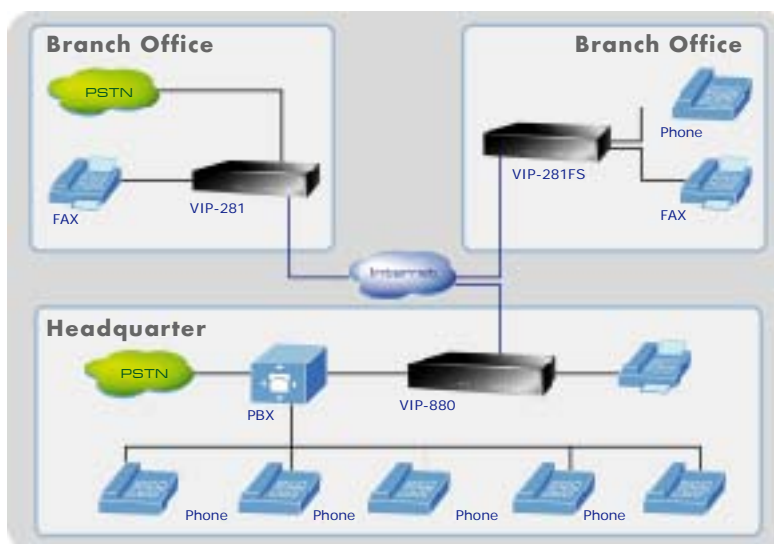
**Virtual Server**
- Remote Users can access services such as the Web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP addresses.

### VoIP Features
- H.323 / SIP dual mode communication
- SIP 2.0 (RFC3261), H.323v4 compliant
- Peer-to-Peer / H.323 GK / SIP proxy calls
- Voice codec support: G.711(A-law /µ-law), G.729 AB, G.723 (6.3 Kbps / 5.3Kbps)
- Voice processing: Voice Active Detection, DTMF detection, G.165/G.168 compliant echo canceller, silence detection, FAX (T.38 / T.30) Mode Option.
- Built in adaptive buffer that helps to smooth out the variations in delay (jitter) for voice traffic.
- Voice channels status display: This function display each port status likes as on-hook, off-hook, calling number called number, talk duration, codec.
- Life-line support for model VIP-281

## Data Sheet

## SPECIFICATION

| Product | 2-Port H.323/SIP VoIP Gateway | |
|---|---|---|
| **Model** | VIP-281 | VIP-281FS |
| **Hardware** | | |
| **WAN** | 1 x 10/100Mbps RJ-45 port | |
| **LAN** | 4 x 10/100Mbps RJ-45 port | |
| **Voice** | 2 x RJ-11 connection (1 x FXS, 1 x FXO) | 2 x RJ-11 connection (2 x FXS) |
| **Protocols and Standard** | | |
| **Standard** | H.323 v2/v3/v4 and SIP (RFC 3261) , SDP (RFC 2327), Symmetric RTP, STUN (RFC3489), ENUM (RFC 2916), RTP Payload for DTMF Digits (RFC2833), Outbound Proxy Support. | |
| **Voice codec** | G.711(A-law /μ-law), G.729 AB, G.723 (6.3 Kbps / 5.3Kbps | |
| **Fax Support** | T.30, T.38 | |
| **Voice Standard** | Voice activity detection (VAD) Comfort noise generation (CNG) G.165/G.168 Echo cancellation Dynamic Jitter Buffer | |
| **Protocols** | SIP 2.0 (RFC-3261), H.323, TCP/IP, UDP/RTP/RTCP, HTTP, ICMP, ARP, NAT, DHCP, PPPoE, DNS | |
| **Advanced Function** | Virtual Server, Smart QoS, IP TOS (IP Precedence) / DiffServ, Build-in NAT router function. | |
| **Network and Configuration** | | |
| **Access Mode** | Static IP, PPPoE, DHCP | |
| **Management** | Web, Telnet | |
| **LED Indications** | System:  1, PWR WAN: 1, LNK/ACT LAN: 4, LNK/ACT Voice 2, In-Use/Ringing | |
| **Dimension (W x D x H)** | 260 x 135 x 35 mm | |
| **Operating Environment** | 0~40 Degree C, 0~95% humidity | |
| **Power Requirement** | 12V DC | |
| **EMC/EMI** | CE, FCC Class B | |

## APPLICATIONS



VIP-281 series multi-office voice communication

## ORDERING INFORMATION

| | |
|---|---|
| *VIP-281* | H.323 / SIP VoIP Gateway  (1 x WAN, 4 x LAN, 1 x FXO/ 1 x FXS; life line support) |
| *VIP-281FS* | H.323 / SIP VoIP Gateway  (1 x WAN, 4 x LAN, 2 x FXS) |

**Data Sheet**

13-06          C-VIP281-1