

# Internet Telephony PBX System



### *Intuitive, Ease-of-Use IP PBX Machine Management*

PLANET IPX-2500 IP PBX telephony system is SIP based and optimized for the small and medium business in daily communications. The IPX-2500 is able to accept **500 user registrations**, and easy to manage a full voice over IP system with the convenience and cost advantages.

### *Leading Enterprises and Workgroup Users to High-Speed Networking Generation*

With the increasing popularity of desktops and laptops built with Gigabit network interface, and wide application of shared Database Device and Multi-media Center day by day, the IPX-2500, equipped with **dual Gigabit RJ-45 ports (10/100/1000Mbps) (WAN/LAN)**, provides advanced voice and data communications features where businesses need to stay productive and responsive.



### *Off-net Calling Capability, Call Restriction, Call Access Control*

The IPX-2500 integrates **up to 8 calls** via the IPX-21FO (4 FXO) , IPX-21SL (2 FXO + 2 FXS), IPX-21GS (4 GSM), IPX-21PR (1 PRI) and IPX-21BR (4 BRI) modules to form a feature-rich PBX system that supports seamless communications between the existing PSTN calls, analog, IP phones and SIP-based endpoints.

## System Highlights

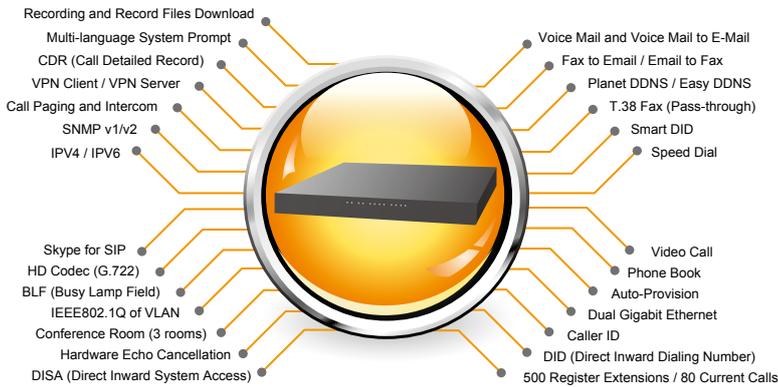
- 80 concurrent calls and up to 500 registers
- Dual Gigabit Ethernet (WAN / LAN)
- HD voice codec G.722 for perfect voice quality
- Fax to Email / Email to Fax for Green Office
- Voicemail to Email for not missing any important message
- Paging and intercom function strengthens work efficiency
- Built-in SIP Proxy Server following RFC 3261
- Multiple language of GUI for international business
- Web based Control Panel for easy configuration and management of the system
- Hardware Echo Cancellation module for great and smooth communication
- Supports VPN Client / Server function.
- Supports maximum 8 ports [FXO / FXS / GSM / ISDN (on 2 slots)]

## Codec and Protocol

- SIP 2.0 (RFC 3261) / IAX2 compliant
- Audio Codec: G.722 / G.711-Ulaw / G.711-Alaw / G.726 / G.729 / GSM / SPEEX
- Video Codec: H.261 / H.263 / H.263+ / H.264
- DTMF: RFC2833, SIP INFO, In-band

## Network and Security Features

- DDNS Client (PLANET DDNS, Easy DDNS, DynDNS, Zone Edit, No IP)
- DHCP Server / SNMP v1/v2
- IEEE 802.1Q of VLAN
- Supports IPv6 in addition to IPv4
- Manual Configuration of Static Route Table
- Trouble Shooting (Ping, Traceroute)
- VPN Client (Supports N2N / L2TP / PPTP / OpenVPN)
- VPN Server ( Supports PPTP / L2TP / OpenVPN Server)
- Refuse SIP Register DoS
- Refuse Abort Invite Dos
- Refuse SSH Login DoS
- Firewall / SRTP



**Replacing old PBX directly without requiring any new wiring to be put in**

Cost-effective, easy-to-install and simple-to-use, the IPX-2500 converts standard telephones to IP-based networks. It enables the service providers and enterprises to offer users traditional and enhanced telephony communication services via the existing broadband connection to the Internet or corporation network.

With the IPX-2500, home users and companies are able to save the installation cost and extend their past investments in telephones, conferences and speakerphones. The IPX-2500 can be the bridge between traditional analog systems and IP network with an extremely affordable investment.

**PBX Features**

- Black List
- BLF (Busy Lamp Field)
- CDR (Call Detailed Record)
- Conference Room (3 rooms)
- DID (Direct Inward Dialing Number)
- DISA (Direct Inward System Access)
- DND (Do not Disturb) / Feature Codes / Flash Operation Panel
- Follow Me / Auto-Provision
- IVR (Interactive Voice Responses)
- Multi-language System Prompt
- Multiple language of GUI
- Phone Book / PIN Set
- Record Files Download
- Ring Group / SIP Trunk
- Skype for SIP / Smart DID / System Log
- T.38 Fax (Pass-through) / Time based rule
- Virtual Fax / Voicemail & Voicemail to Email

**Call Features**

- Call Back / Call Forward / Call Group
- Call Hold / Call Paging and Intercom
- Call Park / Call Pickup / Call Queue
- Call Record / Call Route / Blind Transfer
- Attend Transfer / Call Waiting
- Caller ID / Dial by Name
- Customized IVR / on hold music / Transfer
- Three-way Conference / Video Call



**Distributed VoIP Network Infrastructure**

For the new generation communication age, the IPX-2500 supports IPv6 and VPN (client / server) connection to provide users with more flexible and advantage communication products. With PLANET DDNS function, the IPX-2500 also helps users to apply and remember the login information easier. Moreover, its multiple language features helps user to quickly and friendly manage the system.

*Standard Compliance*

Compliant with the Session Initiation Protocol 2.0 (RFC 3261), the IPX-2500 is able to broadly interoperate with equipment provided by VoIP infrastructure providers, thus enabling them to provide their customers with better multi-media exchange services.

**Compliant with standard SIP RFC 3261**



*Green IP Office*

The Fax to Email / Email to Fax service by the IPX-2500 allows users to transfer / receive faxes directly to / from your email inbox as file attachments. It is an easy and confidential way of receiving, storing and forwarding important fax documents, thus creating a paperless green office.



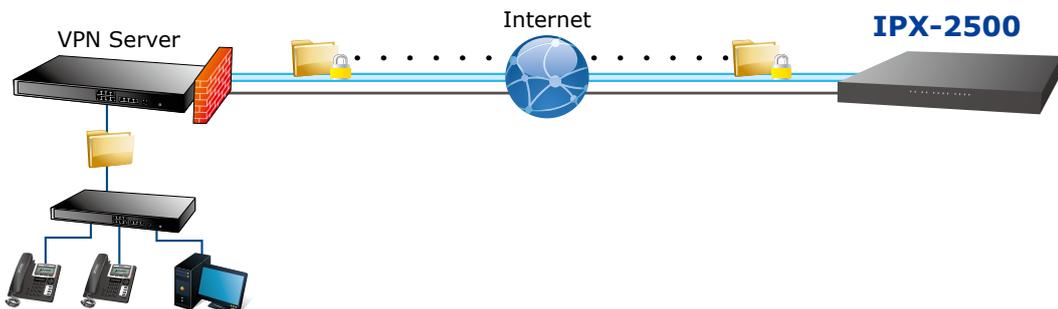
**Green Office (Fax to Email / Email to Fax)**

*Full Security with VPN Support*

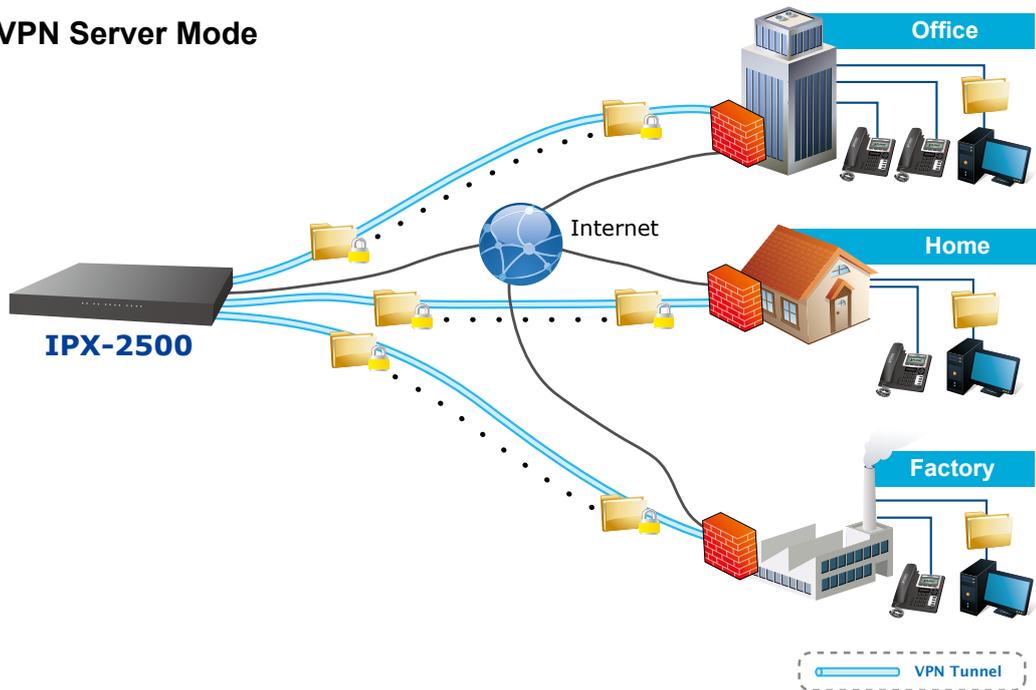
The IPX-2500 VPN securely connects geographically disparate offices of an organization, creating one cohesive virtual network. The IPX-2500 VPN technology is also used by ordinary Internet users to connect to proxy servers for the purpose of protecting one's identity. It includes VPN server and client function that can support users' full security login.

## Supporting Both VPN Client and Server Functions

### VPN Client Mode

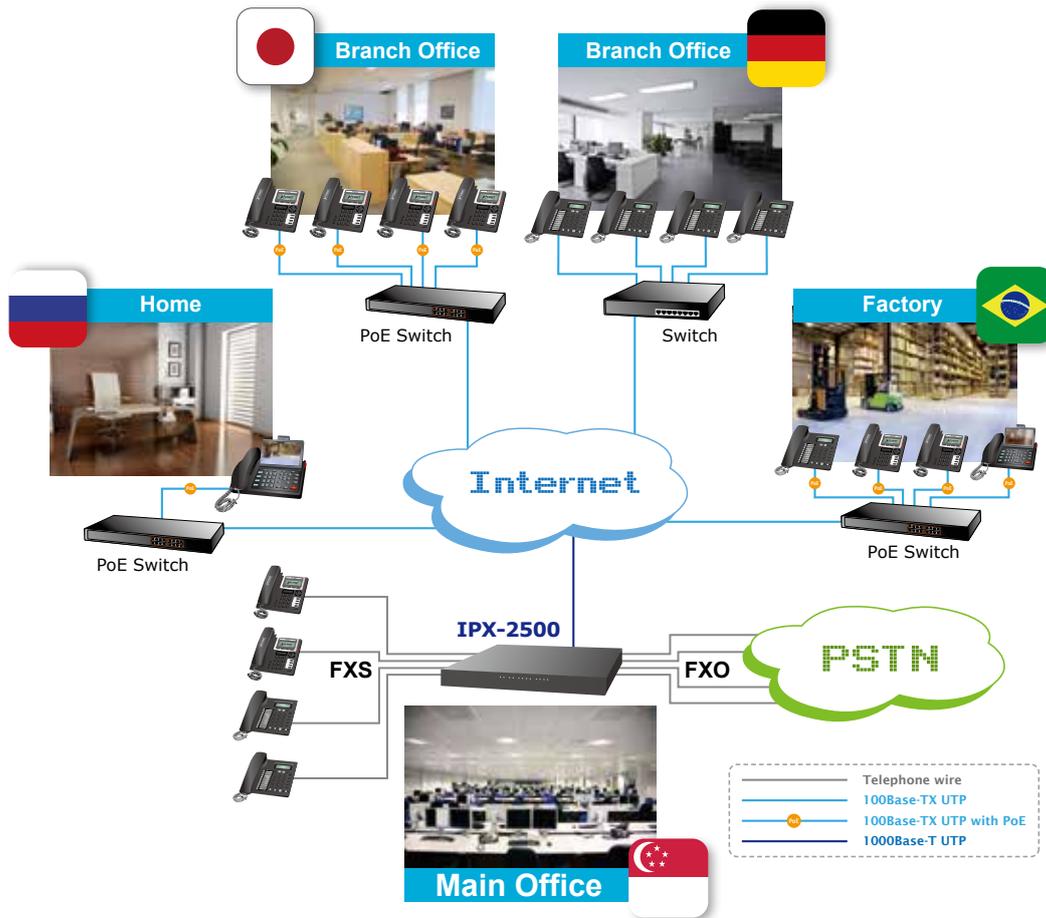


### VPN Server Mode



## Applications

The IPX-2500 provides the essential features you need for business-class voice communications in an easy-to-manage solution. Designed for medium-sized businesses with branch offices, the IPX-2500 perfectly brings voice, conferencing, mobility, voice gateway, and IP PBX services just on one single appliance.



## Specifications

Product	IPX-2500
<b>Hardware</b>	
WAN	1 x 10/100/1000Mbps RJ-45 port
LAN	1 x 10/100/1000Mbps RJ-45 port
2 Slots	2 x vacant slot Supports maximum 8 ports (FXS / FXO / GSM) or two PRIs / BRIs
USB	2 x USB 2.0 type A; Future Feature
Audio	2 x 3.5mm audio jack; Future Feature
VGA	1x DB15 VGA Interface
<b>Protocols and Standard</b>	
Standard	SIP 2.0 (RFC 3261), IAX2
Protocols	RFC 793 TCP RFC 826 ARP RFC 1034, 1035 DNS RFC 1631 NAT RFC 2068 HTTP RFC 2131 DHCP RFC 2516 PPPoE RFC 3261, RFC 3311, RFC 3515 RFC 3265, RFC 3892, RFC 3361 RFC 3842, RFC 3389, RFC 3489 RFC 3428, RFC 2327, RFC 2833 RFC 2976, RFC 3263
Voice Codec	G.722 / G.711-Ulaw / G.711-Alaw / G.726 / G.729 / GSM / SPEEX
Video Codec	H.261 / H.263 / H.263+ / H.264
FAX over IP	T.38 Fax (Pass-through)
Voice Processing	DTMF detection and generation In-Band and RFC 2833, SIP INFO
Protocols	SIP 2.0 (RFC 3261), TCP / IP, UDP / RTP / RTCP, HTTP, ICMP, ARP, DNS, DHCP, NTP / SNTP, PPP, PPPoE
<b>Internet Sharing</b>	
Network Features	DDNS Client (PLANET DDNS, Easy DDNS, DynDNS, Zone Edit, No IP) DHCP Server / SNMP v1/v2 IEEE 802.1Q of VLAN IP Assignment (PPPoE / DHCP / Static) IPv4 / IPv6 Manual Configuration of Static Route Table Troubleshooting (Ping, Traceroute) VPN Client (Supports N2N / L2TP / PPTP / OpenVPN) VPN Server (PPTP / L2TP / OpenVPN Server)
Security Features	Refuse SIP Register DoS Refuse Abort Invite Dos Refuse SSH Login DoS Firewall / SRTP
<b>Features</b>	
PBX Features	Black List BLF (Busy Lamp Field) CDR (Call Detailed Record) Conference Room (3 rooms) DID (Direct Inward Dialing Number) DISA (Direct Inward System Access) DND (Do not Disturb) / Feature Codes / Flash Operation Panel Follow Me / Auto-Provision IVR (Interactive Voice Responses) Multi-language System Prompt Multiple language of GUI Phone Book / PIN Set Record Files Download Ring Group / SIP Trunk Skype for SIP / Smart DID / System Log T.38 Fax (Pass-through) / Time based rule Virtual Fax / Voicemail & Voicemail to Email

Call Features	Call Back / Call Forward / Call Group Call Hold / Call Paging and Intercom Call Park / Call Pickup / Call Queue Call Record / Call Route / Blind Transfer Attend Transfer / Call Waiting Caller ID / Dial by Name Customized IVR / on hold music / Transfer Three-way Conference / Video Call
<b>System Capacity</b>	
System Capacity	80 Concurrent Call Legs Up to 500 IP Phone Registers / Extensions Recording (GSM/ default): 2,500,000 minutes; Wav: 210,000 minutes Voicemail (GSM/ default): 2,500,000 minutes; Wav: 210,000 minutes
<b>Network and Configuration</b>	
Access Mode	Static IP, PPPoE, DHCP
LED Indications	SYS: 1, LNK/Off WAN: 1, LNK/Off LAN: 1, LNK/Off PWR: 1, LNK/Off FXO / GSM: Red FXS: Green
Dimensions (W x D x H)	310 x 500 x 90 mm
Operating Environment	-10~45 degrees C, 10~80% humidity
Power Requirements	AC 100~240V, 50/60Hz, 1.5A max
EMC/EMI	CE, FCC Class B, RoHS

## Ordering Information

IPX-2500	Internet Telephony PBX System (500 SIP User Registrations)
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## Accessories

IPX-21FO	4-Port FXO Module for IPX-2100 / IPX-2500
IPX-21SL	4-Port Life-Line Module for IPX-2100 / IPX-2500 (2FXO + 2FXS)
IPX-21GS	4-Port GSM Module for IPX-2100 / IPX-2500
IPX-21PR	1-Port ISDN Module for IPX-2100 / IPX-2500 (Primary Rate Interface)
IPX-21BR	4-Port ISDN Module for IPX-2100 / IPX-2500 (Basic Rate Interface)

## Related Products

IPX-330	Internet Telephony PBX System (30 SIP User Registrations)
IPX-2100	Internet Telephony PBX System (100 SIP User Registrations)
VIP-156	SIP Analog Telephone Adapter
VIP-156PE	802.3af PoE SIP Analog Telephone Adapter
VIP-157	1 FXS / 1 FXO SIP Analog Telephone Adapter
VIP-157S	2 FXS Analog Telephone Adapter
VIP-256PT	802.3af PoE SIP IP Phone (2-Line)
VIP-362WT	802.11n Wireless Desktop IP Phone
VIP-2020PT	Enterprise HD PoE IP Phone (2-Line)
VIP-5060PT	Professional HD PoE IP Phone (6-Line)
ICF-1700	Touch Screen Internet Multimedia Phone
VGW-402	4-Port SIP VoIP Gateway (2 x FXS + 2 x FXO)
VGW-400FO	4-Port SIP VoIP Gateway (4 x FXO)
VGW-400FS	4-Port SIP VoIP Gateway (4 x FXS)
VIP-281 series	2-Port H.323 / SIP VoIP / GSM Gateway
VIP-880 series	8-Port H.323 / SIP VoIP Gateway
VIP-1680 Series	16-Port H.323 / SIP VoIP Gateway
VIP-2480 Series	24-Port H.323 / SIP VoIP Gateway
UMG-1000	Desktop Unified Office Gateway
UMG-2200	Unified Office Gateway (8-Port FXO)

### PLANET Technology Corporation

11F., No.96, Minquan Rd., Xindian Dist., New Taipei City  
231, Taiwan (R.O.C.)  
Tel: 886-2-2219-9518 Fax: 886-2-2219-9528  
Email: sales@planet.com.tw www.planet.com.tw



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