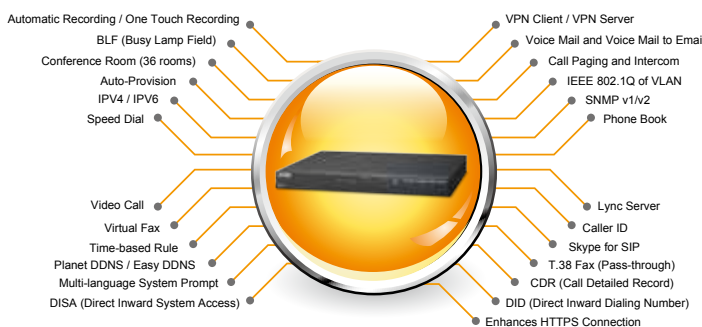# Internet Telephony PBX System

Intuitive, Ease-of-Use IP PBX Machine Management

PLANET IPX-2500 IP PBX telephony system is SIP-based for optimizing communications among the small and medium businesses. 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.

Model	IPX-330	IPX-2100	IPX-2200	IPX-2500
Extension User	30	100	200	500
Concurrent Call	15	30	60	100
Conference Room	3	12	36	36
Room Concurrent Call	10	20	40	80
Recording/Voicemail	600 hrs (.gsm) 66 hrs (.wav)	600 hrs (.gsm) 66 hrs (.wav)	1,500 hrs (.gsm) 150 hrs (.wav)	75,000 hrs (.gsm) 7,500 hrs (.wav)

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

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

Automatic Recording / One Touch Recording
BLF (Busy Lamp Field)
Conference Room (36 rooms)
Auto-Provision
IPV4 / IPV6
Speed Dial
Video Call
Virtual Fax
Time-based Rule
Planet DDNS / Easy DDNS
Multi-language System Prompt
DISA (Direct Inward System Access)

VPN Client / VPN Server
Voice Mail and Voice Mail to Email
Call Paging and Intercom
IEEE 802.1Q of VLAN
SNMP v1/v2
Phone Book
Lync Server
Caller ID
Skype for SIP
T.38 Fax (Pass-through)
CDR (Call Detailed Record)
DID (Direct Inward Dialing Number)
Enhances HTTPS Connection

System Highlights

- 100 concurrent calls and up to 500 registers
- HD voice codec G.722 for perfect voice quality
- Virtual 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 Languages 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.
- Strong security features protect your system from hacking.
- Supports maximum 8 ports for FXO/GSM (on 2 slots)
- Records voice and voicemail to external USB disk
- Supports Lync server

Codec and Protocol

- 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
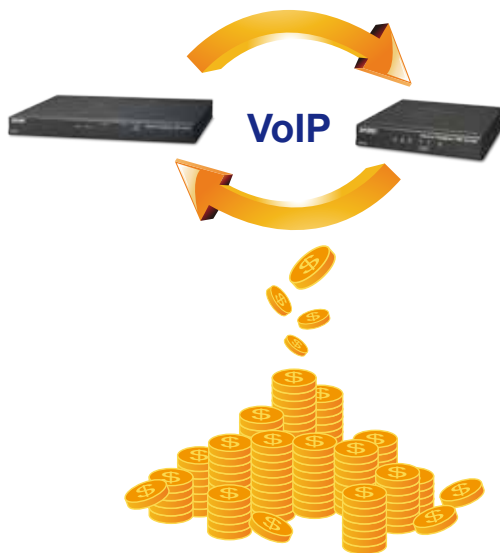- DTMF: RFC 2833, SIP info, in-band

Network and Security Features

- DDNS Client (PLANET DDNS, Dyndns.org, No-ip.com, zoneedit.com, freedns.afraid.org, www.oray.com, 3322.org)
- DHCP Server, SNMP v1/v2
- IEEE 802.1Q of VLAN
- IPv4/IPv6, SIP over IPv6
- Manual Configuration of Static Route Table
- Troubleshooting (Ping, Traceroute)
- VPN Server (L2TP/PPTP/OpenVPN/IPSec, up to 20 connections for VPN clients)
- VPN Client (L2TP/PPTP/OpenVPN/N2N/IPSec)
- Refuse SIP Register DoS
- Refuse Abort Invite Dos
- Refuse SSH Login DoS
- Firewall/SRTP
- Enhances HTTPS connection

Replacing Old PBX Easily without New Wiring

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.

VoIP

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 advantageous communications products. With PLANET DDNS function, the IPX-2500 also helps users to apply and remember the login information easier. Moreover, its multiple language feature helps user to quickly and friendly manage the system. The IPX-2500 supports Lync server to which smart phone (using third-party app) and analog phone are connected via its communication with other devices of Lync server.

PBX Features

- Auto-Provision (PLANET/Cisco IP Phone)
- Black List
- BLF (Busy Lamp Field), Speed Dial
- CDR (Call Detailed Record) (20000 records)
- Conference Room (36 rooms)
- Call Queue Record, Ring Group Record
- DoD (Direct Outward Dialing) and DID (Direct Inward Dialing Number) numbers
- DISA (Direct Inward System Access)
- DND (Do Not Disturb)
- Feature Codes, Flash Operation Panel
- Flexible Dial Plan, Follow Me
- IVR (Interactive Voice Responses)
- LDAP Server for phonebook
- Multi-language System Prompt
- Multiple Languages of GUI
- One Number Stations
- Phone Book, PIN Set
- Phonebook, LDAP (5000 contacts)
- Record Files Download
- Ring Group, SIP Trunk
- Skype for SIP/Smart DID/System Log/System Backup
- T.38 fax (pass-through)/time-based rule
- Virtual Fax/Voicemail & Voicemail to Email
- WebRTC

Call Features

- Attend Transfer, Call Waiting
- Call Back, Call Forward, Call Group
- Call Hold, Call Paging and Intercom
- Call Park, Call Pickup, Callback
- Call Center Queues (36)
- Call Record, Call Route, Blind Transfer
- Caller ID, Dial by Name
- Customized IVR, On-hold Music, Transfer
- Three-way Conferencing, Video Call

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

Virtual fax functionality on IPX-2500 system allows faxes to be sent and received without requiring a fax machine. This useful feature will allow businesses to demonstrate their green credentials while at the same time reduce fax related costs across the enterprise. Inbound faxes can be automatically received and converted to TIF files and saved in the IPX-2500 system. It is also possible to configure the IPX-2500 system to send the TIF files to a user's email box. Sending outbound faxes is as easy as uploading a file from the extension user web portal, thus creating a paperless or green office.
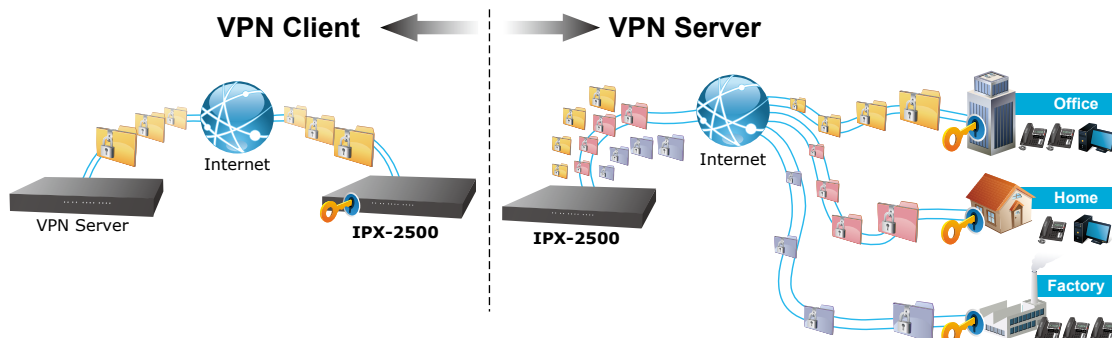

Green Office (Fax to Email / One-touch to send fax)
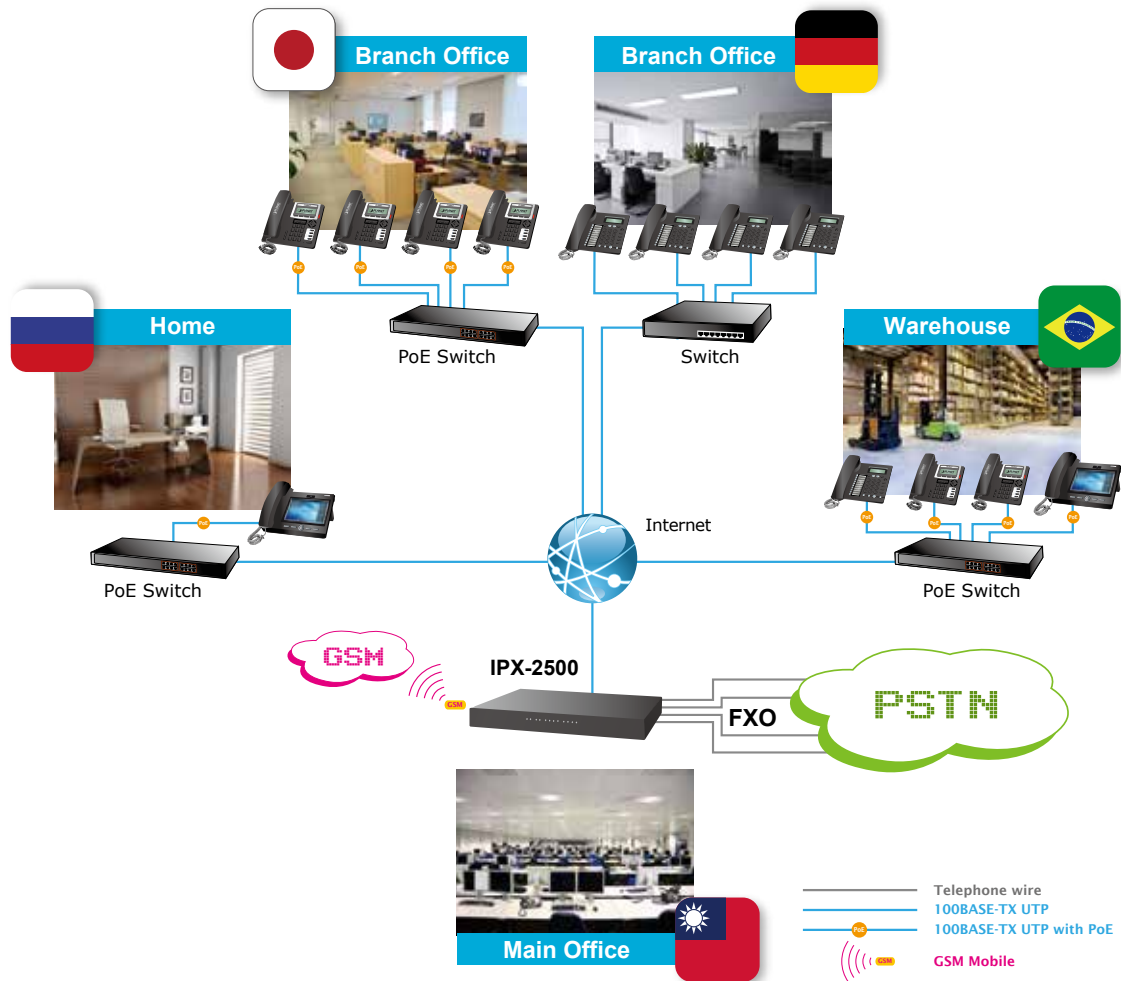
Full Security with VPN Support

The IPX-2500 VPN securely and cost-effectively connects geographically disparate offices of an organization, creating one cohesive virtual network. The IPX-2100 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.

Supports VPN Client and VPN Server

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 voice, conferencing, mobility, voice gateway, and IP PBX services are created on a single appliance.

Specifications

Product	IPX-2500
Hardware	
WAN	1 x 1000BASE-T RJ45 for WAN, connecting to broadband modem or a WAN router
LAN	1 x 1000BASE-T RJ45 for LAN, connecting to a LAN switch
HDMI Port	For video output (factory use)
USB	For external store device to store voice and voicemail
Audio In/Out	For external paging.
2 Slots	Supports maximum 8 ports for FXO/GSM
USB	Store data for external disk
Protocols and Standard	
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) Note: T.38 support is dependent on fax machine, SIP provider and network/transport resilience.
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/HTTPS, ICMP, ARP, DNS, DHCP, NTP/SNTP, PPP, PPPoE
Internet Sharing	
Network Features	DDNS client (Planet DDNS and easy DDNS) 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 (N2N, L2TP, PPTP, Open VPN and IPSec) VPN server (PPTP, L2TP, Open VPN and IPSec)
Security Features	Refuses SIP Register DoS Refuses Abort Invite Dos Refuses SSH Login DoS Firewall/SRTP
PBX Features	Auto-Provision (PLANET/Cisco IP Phone) Black List BLF (Busy Lamp Field), Speed Dial CDR (Call Detailed Record) (20000 records) Conference Room (36 rooms) Call Queue Record, Ring Group Record DoD (Direct Outward Dialing) and DID (Direct Inward Dialing) numbers DISA (Direct Inward System Access) DND (Do Not Disturb) Feature Codes, Flash Operation Panel Flexible Dial Plan, Follow Me IVR (Interactive Voice Responses) LDAP Server for phonebook Multi-language System Prompt Multiple Languages of GUI One Number Stations Phone Book, PIN Set Phonebook, LDAP (5000 contacts) Record Files Download Ring Group, SIP Trunk Skype for SIP/Smart DID/System Log/System Backup

PBX Features	T.38 fax (pass-through)/time-based rule Virtual Fax/Voicemail & Voicemail to Email WebRTC
Call Features	Attend Transfer, Call Waiting Call Back, Call Forward, Call Group Call Hold, Call Paging and Intercom Call Park, Call Pickup, Callback Call Center Queues (36) Call Record, Call Route, Blind Transfer Caller ID, Dial by Name Customized IVR, On-hold Music, Transfer Three-way Conferencing, Video Call

System Capacity	
System Capacity	100 concurrent call legs Up to 500 IP phone registers/extensions Recording and Voicemail (GSM/default): 75000 hours; Wav: 7500 hours

Network and Configuration	
Access Mode	Static IP, PPPoE, DHCP
LED Indications	PWR: 1, LNK/Off SYS: 1, LNK/Off WAN: 1, LNK/Off LAN: 1, LNK/Off SLOT: 2, FXO/GSM (Red), FXS (Green)
Dimensions (W x D x H)	343 x 154 x 35 mm
Operating Environment	-10~45 degrees C 10~80% humidity
Power Requirements	AC 100V-240V, DC 12V/2A, 50/60Hz
EMC/EMI	CE, FCC Class B, RoHS

Ordering Information

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

Accessories

IPX-21FO	4-Port FXO Module for IPX-2100/IPX-2200/IPX-2500
IPX-21GS	4-Port GSM Module for IPX-2100/IPX-2200/IPX-2500

Related Products

IPX-330	Internet Telephony PBX System (30 SIP User Registrations)
IPX-2100	Internet Telephony PBX System (100 SIP User Registrations)
IPX-2200	Internet Telephony PBX System (200 SIP User Registrations)
VIP-157S	2 FXS Analog Telephone Adapter
VIP-156	SIP Analog Telephone Adapter
VIP-156PE	802.3af PoE SIP Analog Telephone Adapter
VIP-1000T	High Definition IP Phone (1-Line)
VIP-1000PT	High Definition PoE IP Phone (1-Line)
VIP-1010PT	High Definition PoE IP Phone (1-Line)
VIP-2020PT	Enterprise HD PoE IP Phone (2-Line)
VIP-5060PT	Professional HD PoE IP Phone (6-Line)
VIP-6040PT	Gigabit Color LCD HD PoE IP Phone (4-Line)
VIP-8030NT	HD Voice Conference IP Phone with PSTN (3-Line)
ICF-1800	HD Touch Screen Android Multimedia Conferencing Phone (6-Line)
VIP-1680 Series	16-Port H.323/SIP VoIP Gateway
VIP-2480 Series	24-Port H.323/SIP VoIP Gateway
VGW-400 Series	4-Port SIP VoIP Gateway
VGW-800 Series	8-Port SIP VoIP Gateway
UMG-1000	Desktop Unified Office Gateway
UMG-2200	Unified Office Gateway (8-Port FXO)

IPX-2500