

# Internet Telephony PBX System



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

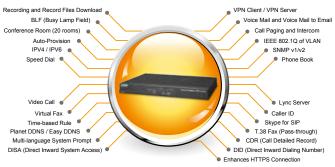
PLANET next-generation IPX-2100 IP PBX telephony system is easy to set up and manage thanks to a perceptive web-based user interface and **quick setup wizard**. Since it is an **Asterisk-based** equipment, the entire benefits of the pre-loaded **SIP** can be had as any other enterprise-level appliance would come equipped with the feature. The IPX-2100 is able to accept **100 user registrations**, and easy to manage a full voice over IP system with the convenience and cost advantages. The equipment is best paired with PLANET color IP phones to get the function going smoothly and to have a seamless connection between the software and hardware.



Model	IPX-330	IPX-2100	IPX-2200	IPX-2500
Extension User	30	100	200	500
Concurrent Call	15	30	60	100
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-2100 integrates **up to 8 calls** via the IPX-21FO (4 FXO), IPX-21SL (2 FXO + 2 FXS) and IPX-21GS (4 GSM) modules to form a feature-rich PBX system that supports seamless communications between the existing PSTN calls, analog phones, IP phones and SIP-based endpoints.



#### System Highlights

- 30 concurrent calls and up to 100 registers
- · HD voice codec G.722 for perfect voice quality
- · Fax to Email and Email to Fax for green office
- Voicemail to Email for not missing any important message
- Paging and intercom function strengthens the 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
- Strong security features protect your system from hacking
- Maximum 8 ports FXO/FXS/GSM (on 2 slots)
- · Records voice and voicemail to external USB disk
- Quick Setup Wizard

#### Codec and Protocol

- SIP 2.0 (RFC3261), IAX and Lync server compliant
- Audio Codec: G.711-Ulaw, G.711-Alaw, G.722, G.726, G.729, GSM, Speex and Opus
- Video Codec: H.261, H.263, H.263+, H.264 and VP8
- · DTMF: RFC 4733, SIP info, in-band and auto

#### **Network and Security Features**

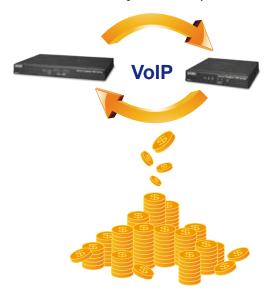
- DHCP Server, DDNS Client (PLANET DDNS & Easy DDNS)
- SNMP v1/v2, IEEE 802.1Q of VLAN
- IPv4/IPv6, TR069
- Manual Configuration of Static Route Table
- Troubleshooting (Ping, Traceroute)
- · VPN Server, VPN Client
- · Refuse SIP Register DoS,
- · Refuse Abort Invite Dos
- Refuse SSH Login DoS
- · Firewall and enhances HTTPS connection



#### Replacing Old PBX Easily without New Wiring

Cost-effective, easy-to-install and simple-to-use, the IPX-2100 converts standard telephones into 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-2100, home users and companies are able to save the installation cost and extend their past investments in telephones, conferences and speakerphones. The IPX-2100 can be the bridge between the traditional analog system and IP network without having to invest heavily.



#### Distributed VoIP Network Infrastructure

In the new-generation communication age, the IPX-2100 supports IPv6 and VPN (client/server) connection to provide users with more flexible and advantageous communications products. With PLANET DDNS function, the IPX-2100 also helps users to apply and remember the login information easier. Its multiple-language feature helps user to quickly and friendly manage the system. Moreover, the IPX-2100 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**

- SIP Register with UDP/TCP/TLS
- · One Touch Recording
- · Mobility Extension
- · Black List
- BLF (Busy Lamp Field)
- · CDR (Call Detailed Record)
- · Conference Room
- · DID (Direct Inward Dialing Number)
- SRTP (Secure Realtime Transport Protocol)
- DND (Do Not Disturb)
- IVR (Interactive Voice Responses)
- · Follow Me, Call Spy and PIN Set
- Distinctive Ringtone
- Multi-language System Prompt
- Phone Book, Speed Dial
- · Ring Group, SIP Trunk
- · Skype for SIP, Smart DID, System Log
- T.38 fax (pass-through), voicemail and voicemail to e-mail

#### 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 Conferencing, Video Call



#### Standard Compliance

Compliant with the Session Initiation Protocol 2.0 (RFC 3261), the IPX-2100 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.



#### Green IP Office

The Fax to Email/Email to Fax service provided by the IPX-2100 allows users to transfer and receive faxes directly to or 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.



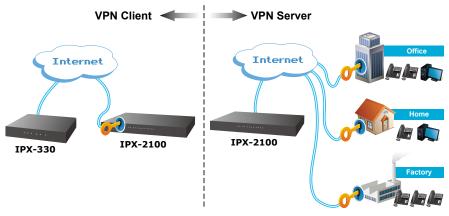
Green Office (Fax to Email / Email to Fax)

## **Applications**

#### Full Security with VPN Support

The IPX-2100 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.

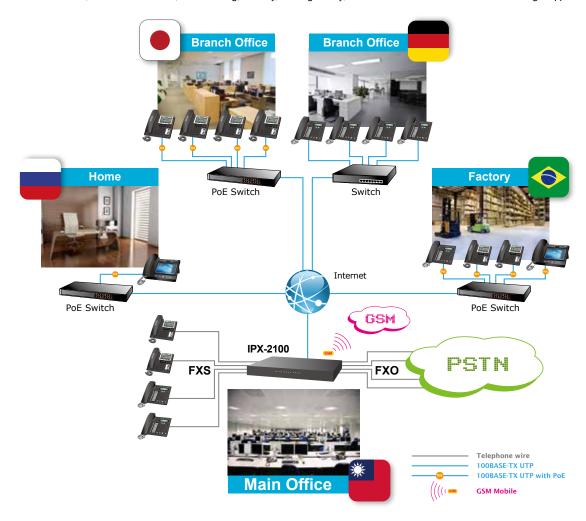
## Supports VPN Client and VPN Server



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The IPX-2100 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-2100 voice, conferencing, mobility, voice gateway, and IP PBX services are created on a single appliance.





# Specifications

Product	IDV 2100	
Hardware	IPX-2100	
LAN	1 x 100BASE-TX RJ45 for LAN	
WAN	1 x 100BASE-TX RJ45 for WAN	
2 Slots	Supports maximum 8 ports (FXS/FXO/GSM)	
USB	Store data for external disk	
Console	Console Interface	
Reset Button	Reset to factory default	
Protocols and Standard	·	
Standard	SIP 2.0 (RFC 3261), IAX2	
Request for Comments (RFCs)	RFC 793 TCP RFC 826 ARP RFC 1034, 1035 DNS RFC 1631 NAT RFC 2068 HTTP RFC 2131 DHCP RFC 2516 PPP0E 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.711-Ulaw, G.711-Alaw, G.722, G.726, G.729, GSM, Sp	neey and Onus
Video Codec	H.261, H.263, H.263+, H.264 and VP8	роск ана Ориз
	T.38 Fax (pass-through)	
Fax over IP	Note: T.38 support is dependent on fax machine, SIP pro	ovider and network/transport resilience
Voice Processing	DTMF detection and generation RFC 4733, SIP info, in-band and Auto	
Protocols	SIP 2.0 (RFC 3261), TCP/IP, UDP/RTP/RTCP, HTTP, 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 (DHCP/Static)  IPv4, IPv6  Manual configuration of static route table  Troubleshooting (ping, traceroute)	
Security Features	VPN server ,VPN client Refuse SIP Register DoS, Refuse Abort Invite Dos Refuse SSH Login DoS Firewall and enhances HTTPS connection	
Features		
PBX Features	SIP Register with UDP/TCP/TLS Phone Auto-Provision One Touch Recording Mobility Extension Black List BLF (Busy Lamp Field) CDR (Call Detailed Record) Conference Room DID (Direct Inward Dialing Number) DISA (Direct Inward System Access) DNIS (Dialed Number Identification Service) SRTP (Secure Realtime Transport Protocol) DND (Do Not Disturb) FOP (Flash Operation Panel) Status Monitoring	IVR (Interactive Voice Responses) Follow Me, Call Spy and PIN Set Distinctive Ringtone Multi-language System Prompt Multiple Language of GUI Phone Book, Speed Dial LDAP Server for phonebook Record Files Download Ring Group, SIP Trunk Skype for SIP, Smart DID, System Log T.38 fax (pass-through), voicemail and voicemail to e-mail Time-based Rule PBX log, web access log and PBX debug log
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 Conferencing, Video Call	



System Capacity		
System Capacity	30 concurrent call legs Up to 100 IP phone registers/extensions Recording and Voicemail: 150 hours	
Network and Configuration		
Access Mode	Static IP, DHCP	
LED Indications	SYS: 1, LNK/Off WAN: 1, LNK/Off LAN: 1, LNK/Off PWR: 1, LNK/Off SLOT: FXO/GSM (Red), FXS (Green)	
Dimensions (W x D x H)	343 x 154 x 35 mm	
Operating Environment	0~40 degrees C, 5~95% humidity	
Power Requirements	Input: 100 ~ 240V AC Output: DC 12V 2A	
EMC/EMI	CE, FCC Class B, RoHS	

## **Ordering Information**

internet relephony FBX System (100 SIP Oser Registrations)	IPX-2100	Internet Telephony PBX System (100 SIP User Registrations)	
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### Accessories

IPX-21FO	4-Port FXO Module for IPX-2100, IPX-2200 and IPX-2500
IPX-21SL	4-Port Life-Line Module for IPX-2100, IPX-2200 and IPX-2500 (2FXO + 2FXS)
IPX-21GS	4-Port GSM Module for IPX-2100, IPX-2200 and IPX-2500

## **Related Products**

IPX-330	Internet Telephony PBX System (30 SIP User Registrations)
IPX-2200	Internet Telephony PBX System (200 SIP User Registrations)
IPX-2500	Internet Telephony PBX System (500 SIP User Registrations)
VIP-1000T	High Definition IP Phone(1-Line)
VIP-1000PT	High Definition PoE IP Phone(1-Line)
VIP-1120PT	High Definition Color IP Phone(1-Line)
VIP-2140PT	High Definition Color PoE IP Phone with Dual Display (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)
HDP-1100PT	720p SIP Door Phone with PoE
HDP-5240PT	720p SIP Multi-unit Video Door Phone with RFID and PoE
HDP-5260PT	720p SIP Multi-unit Apartment Vandalproof Door Phone with RFID and PoE
HTS-700P	7-inch Indoor Touch Screen PoE Video Intercom
VIP-100	SIP Public Announcement Adapter with PoE
VIP-156	SIP Analog Telephone Adapter
VIP-156PE	802.3af PoE SIP Analog Telephone Adapter
VIP-157S	2 FXS Analog Telephone Adapter
VGW-400 Series	4-Port SIP VoIP Gateway
VGW-800 Series	8-Port SIP VoIP Gateway
UMG-1000	Desktop Unified Office Gateway (100 SIP User Registrations)

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IPX-2100