



# SOHO SIP Gateway IX100 Technical Specifications

**IX100 Full Featured VoIP SIP Gateway, NAT  
Router for Home and Small Office**

## Introduction

The **SOHO SIP Gateways** combines complete IP-PBX features with standards SIP telephony solution that can co-work with existing phone systems. **iPBX IX100** both implemented with embedded system with built-in SIP Proxy Server and NAT router. For SOHO users, they not only provide IP telephony features but also provide various network functions in home or small office.

## Major Features

### IP PBX / VoIP Service Features

- Trunk
  - Trunk Management: Support SIP Trunk / Gateway Trunk Management
  - Support two-stage /one-stage call to Trunk by Trunk Group Configuration
  - Support up to 5 Multiple Service Providers Lines / SIP Accounts
  - Simultaneous Trunk Links: 10 concurrent trunk calls
  - Optional external FXO analog gateway to link PSTN trunk Line
  - Optional external GSM VoIP gateway to link GSM trunk line
- Extensions
  - Built-in SIP Proxy Server Following RFC-3261
  - Support password authentication using MD5 digest and RFC2833 for DTMF Relay
  - 20 extension registrations.
  - 3 on-net/off-net concurrent calls
- Configurable Call Routing (Dial Plan)
  - Least Cost Routing
  - Call Hunting – Round Robin
- Call Detail Records
- Extensions Status Monitor
  - Register Status
  - Talking Status

- Call hold / call waiting / 3 way conference
- Forwarding - unconditional / unavailable / busy for Each Extension
- Group based call pick-up
- Meet - Me Room Conference (admin / User IP-Phone control , Dynamic Password ,Password for admin / user )
- Dial Voice mail control (Message to Email / Voice to Email / Reservations machine)
- Message Waiting Indicator (MWI)
- Allow Send SIP Message
- DTMF Support: DTMF Relay, info, In-band

### Call Services

- Call Waiting Music on hold / Resume
- Call Transfer ( Attendant / Blind )
- Call Forward: Direct ( IP-Phone Control, Web Control )
- Call Forward: On Busy Forward ( IP-Phone Control, Web Control )
- Call Forward: No answer Forward ( IP-Phone Control, Web Control )
- Call Group (from Incoming call )
- Call Pickup (IP-Phone dial pickup , same group)
- Auto - attendant (attendant message / attendant time)
- Caller ID
- Call Parking

### Audio/Video Codec Support

- Voice Codec: G.711 (A-law /  $\mu$ -law), G.726, GSM, iLBC.
- Allow Video H261 / H263 / H264 /MPEG-4 protocols

### Voice Mail

- Mail Box Access Control (PIN)
- 20 minutes recording time
- MWI notification
- Voice mail to e-mail
- Optional Multi-lingual

### Network Features

- LAN : NAT, DHCP Server
- WAN: PPPoE client, DHCP client, Fix IP Address, DDNS client
- 7. Network Address Translation: Providing build-in NAT router function
- 8. Static Routing
- 9. Virtual DMZ
- 10. Port Mapping

### Wireless LAN (WiPBX IX101 only)

- Support IEEE 802.11g / IEEE 802.11b WiFi Modes
- Wireless Frequency Range: 2.4GHz - 2.4835 GHz.

- Wireless Distribution System:
  - AP Only Mode
  - AP-Client Mode,
  - AC Only Mode.
- Security: 64/128 bit WEP data encryption, WPA, WPA-PSK, WPA2, WPA2-PSK, WPA/WPA2 mix mode, WPAPSK/WPA2PSK mix mode.
- Wireless Signal Range :
  - Indoors: Up to 230 ft (70 meters)
  - Outdoors: Up to 1050 ft (320 meters)

### Management

- WEB Based Management
- HTTP method for Firmware Upgrade
- Backup / Restore Configuration File
- Record Greeting by IP Phone set
- Auto-provision Server for IP Phone configuration (Optional)

### Protocol Standard

- SIP (RFC 3261)
- SDP (RFC 2327)
- RTP (RFC 1889)
- RTCP (RFC 1889)
- Out-Of-Band DTMF (RFC2833)

### Wireless LAN: (WiPBX IX101Only)

- Complies with 802.11g and 802.11b (2.4GHz) Standards
- Data Rates up to 54Mbps
- Support WEP, WPA data encryption to secure wireless connection
- Both Support Wireless Access Point Mode and Wireless Client Mode

## Hardware Specifications

Feature	Description
<b>System &amp; Network</b>	
WAN	10/100BaseT, Auto-MIDX, RJ45
LAN	10/100BaseT, Auto-MIDX, RJ45
LED Indicators	<ul style="list-style-type: none"> <li>■ Power Status</li> <li>■ WAN Status</li> <li>■ LAN Status</li> </ul>
Power Consumption	12 Watts (Maximum)
Power Adapter	12V/1.5A, 100 ~ 240V/50-60Hz, Switching Power Adapter
<b>Wireless</b>	
Wireless Module	IEEE 802.11g/802.11b
Antenna	External 2dBi Gain detachable dipole antenna with reverse SMA connector
<b>Environment Factors</b>	
Operating Condition	<ul style="list-style-type: none"> <li>■ Temperature: -10°C ~ 55°C</li> <li>■ Humidity: 10% ~ 80%</li> </ul>
Storage Condition	<ul style="list-style-type: none"> <li>■ Temperature: -20°C ~ 60°C</li> <li>■ Humidity: 0% ~ 90%</li> </ul>
<b>Regulatory Certifications</b>	
FCC	CFR 47, Part 15 Subpart B: 2006 Class B, CISPR 22: 2006
CE	EN55022:1998/A1:2000/A2:2003 EN61000-2-3: 2000/A2:2005 EN61000-3-3: 1995/A1:2001 EN55024: 1998/A1:2001/A2:2003 IEC 61000-4-2 : Edition 1.2:2001-04 IEC 61000-4-3 : 2002/ A1:2002 IEC 61000-4-4 : 2004 IEC 61000-4-5 : Edition 1.1:2001-04 IEC 61000-4-6 : Edition 2.1:2004-11 IEC 61000-4-8 : Edition 1.1:2001-03 IEC 61000-4-11 Second Edition: 2004-03 AS/EZS CISPR 22: 2004