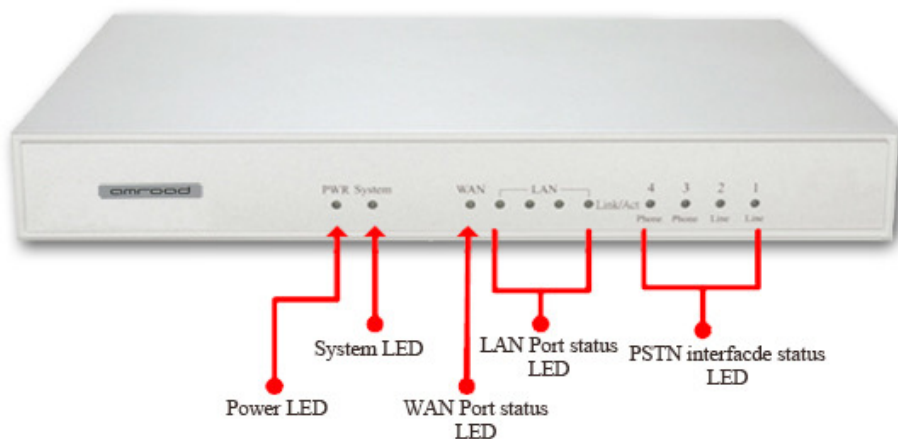




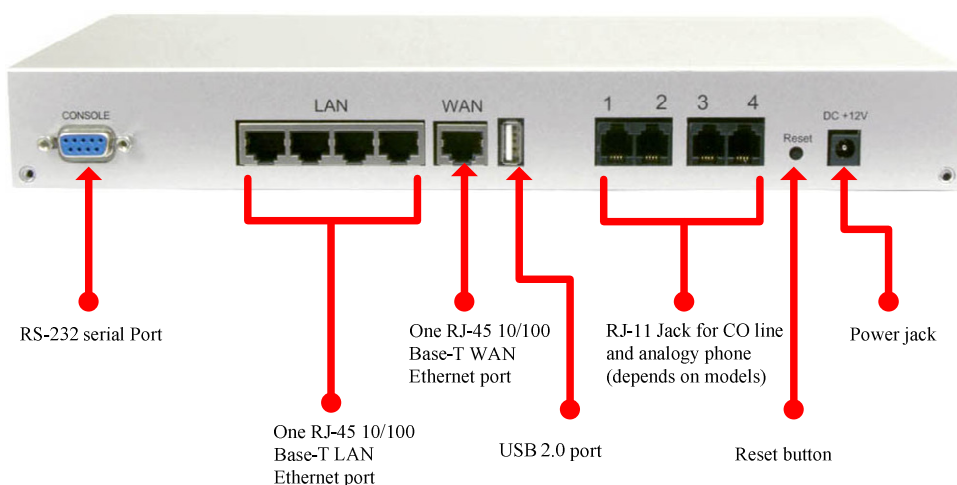
## Business SIP Gateway IX1801 Technical Specifications

### What you need today is Essence IPBX for tomorrow's productivity

Energize your business with effective Essence IPBX system which comes with easy setup and administrator-friendly designs. Essence IPBX system delivers you the best---for its high technology integration that can maximize the work efficiency of *any business* and is worth of every dollar of your investment.



Front View



Rear View

### System Highlight

Highly integrated, embedded system for more stability and worth of your investment  
Immediately provides VoIP connection to ITSP and to any remote site  
Analog interface to PSTN  
Seamless integration with legacy PBX  
Flexible dialing plan settings for applying to a virtual IP-PBX system  
Off-ramp and on-ramp call for VoIP and PSTN  
Remote management capability  
Quick-batch configuration by Command Line Interface (CLI)

### Features Highlight

Customizable 3-layer IVR for creating your own IVR scenarios  
Various automatic schemes including auto provision and auto firmware upgrade  
UMS ( Unified Messaging feature ) supported  
Meet-me conference service to expend you meeting room virtually  
Newly released wizard function for easier configuration  
Function-rich Voice Mail System to manage your voice message efficiently  
Voice Mail System with Email Notification  
CAC (Call Admission Control )  
Call keep alive scheme  
Most legacy PBX features supported  
CDR (Call Detail Record) with .CSV file format  
FAX relay and pass through

## SIP Compliance

### Supported Standards

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, RFC 3264

RFC 3362, RFC 4612,

### SIP Registrar

Static/Dynamic registration  
Configurable Expiry Time  
MD5 authentication  
Handle loose RFC-compliant SIP devices  
Resilient message retry mechanism  
Cache client registrations

### SIP Proxy

Stateful proxy server  
NAT traversal for clients  
Inter-proxy call hand-off  
Outbound Proxy behind NAT Device

## PBX System

**Call Features**

30 users and extensions with Voice Mail account  
 10 concurrent sessions<sup>2</sup>  
 Codec G.711 (μ /A-law), G.723.1 (6.3k/5.3k bit/s), G.729A, and G.726 (16k/24k/32k/40k bit/s) supported  
 4 transcoding channels<sup>1</sup>  
 In-band/RFC2833/SIP-INFO DTMF translation  
 5 SIP trunks for ITSP account or private trunking shared by extensions  
 30 DID SIP trunks to extensions  
 Support gateway trunk mode per SIP trunk  
 Enable/Disable NAT Traversal per SIP trunk  
 Call admission control of call count or bandwidth per SIP trunk  
 Long call audit  
 Support Call keep alive  
 Support Registered keep alive  
 NAT session keep alive  
 Configurable RFC 2833 payload type per SIP trunk  
 FXS/FXO analog trunking  
 FXO disconnection tone detection  
 FXO disconnection tone parameter setting  
 FXS hot line  
 FXS warm line  
 Caller ID detection  
 Trunk hunting  
 Digits manipulation during hunting  
 Life-line priority call  
 Support SIP Call Hold, Call Waiting  
 Support SIP phone<sup>5</sup> 3-way conference  
 Support Blind/ Attended Transfer  
 In-line Call Transfer  
 Unconditional, Unavailable, Busy Call forward  
 Call Back on Busy between extensions  
 Per calling number forward and rejection  
 Blacklist of number patterns  
 32 call pick-up groups  
 Call Park and Retrieve  
 Recording on demand with Essence IP phones  
 Remote extension registration via Internet  
 Direct line to extension (DID to Extension)  
 Direct line by called number (DID by Number)  
 Direct line by privilege (DID by Privilege)  
 Echo Cancellation (G.168)  
 Flexible numbering plan  
 Call privilege grouping  
 Configurable Music on Hold  
 Memo Call for extension  
 Schedule-based Broadcast  
 Support T.38 FAX over IP  
 Support T.30, T.38 FAX pass through  
 ENUM resolution  
 Auth. Dial passcode  
 Group Call  
 Support H.261, H.263, H.264, MPEG-4 and MJPEG Video codec pass through  
 Peer to Peer (Invite/Update)  
 Fast Bridging for expressing media forwarding

**NAT**

Auto NAT discovery and traversal  
 Built-in STUN client  
 RTP proxy

RTP port range designation

### **IVR**

25 configurations of 3-layer IVR  
Worktime/Holiday setting for different IVR  
Configurable greeting prompts  
Music on Ringing extensions  
Forward to Voice Mail on No-answer  
Hot key to operator

### **Voice Mail**

User Authentication by PIN  
Multi-folder Archive  
Fast-forward /Rewind /Undelete

MWI notification  
VMWI notification  
E-mail notification and attachment (Unified messaging)  
Personal greeting on unavailability and busy  
Record personal greeting through phone  
Voicemail Forwarding  
Reply call or new call after logged in Voicemail menu  
Built-in 256MB flash for Voicemail  
Support USB 2.0 interface for Voicemail, CDR, and system configuration backup  
Support NFS remote backup for Voicemail, CDR, and system configuration

### **Meet-me Conference**

8 conference rooms with configurable number and PIN  
Up to 8 parties<sup>4,1</sup> among all conference rooms  
Lock/Mute/Join/Drop control for administrator  
Music on First Dial-in Party  
Hot key to leave the conference  
Hot key for administrator to manage the conference

## **Administration**

### **System Management**

Web-based configuration with session control  
User and administrator configuration mode  
Automatic expiring the idle sessions  
Support firmware upgrade through the Internet  
Configuration Wizard for mass extensions and users creation  
Step-by-Step Wizard for adding users, extensions and trunks  
Built in online help in wizard  
Command Line Interface (CLI) for configuration  
System event Syslog  
Downloadable Call Detail Record (CDR)  
Extension registration status  
Active call status  
TFTP server and TFTP repository maintenance  
NTP synchronization  
Real Time Clock setting  
DHCP Server with multiple partitions, Per-MAC IP binding, list of options  
Configurable Time Zone  
Firmware Upgrade through web interface and console

### **Network Management**

DHCP/PPPoE/Static IP on WAN  
Support MAC Clone on WAN  
Allow WAN to Respond PING  
Allow LAN use only

Static LAN routing  
Firewall on predefined services  
Virtual Server for client device  
NAT for outbound traffic from LAN  
WAN QoS queuing mechanism for VoIP and data traffic  
Support TOS setting  
DNS forwarder and dynamic DNS  
SNMPv2 with standard MIB format  
Adaptive WAN bandwidth and DSP channel saving

## Hardware Specification

### Hardware Interfaces

One RJ-45 10/100 base-T WAN Ethernet port  
Four RJ-45 10/100 base-T LAN Ethernet ports  
4 FXO/ 4FXS/ 2FXO2FXS/ 3FXO1FXS RJ-11 PSTN interface. (Depends on different models)  
One USB 2.0 port  
One RS-232 serial port

### System Dimension

300 x 155 x 38 (mm)

### System Power Requirement

Power input 100~240V AC, 50~60 Hz  
25 W (max)

### Environment

Operating temperature 0~50°C  
Storage temperature -10~70°C  
Humidity (RH) 10~80% non-condensing

### Regulatory and Safety

FCC Class A certified, FCC part 68, CE/EMC/LVD/TBR21, VCCI, JATE, ROHS, DGT

