

# VL Series IP-PBX for Small Business

## VL1050

- Various Up-to-Date IP-PBX Features
- Stable Operation & Seamless Communication
- Remote Office and Interoperation between VL Series PBXs
- Optimized for Small Business Environment



VL1050 is VL series IP-PBX particularly developed for meeting the most needs of SME. VL1050 offers all the functions of a traditional PBX such as Call Hold, Call Transfer, Call Pickup, and Call Forwarding. And it also provides rich advanced features such as IVR, Voicemail to E-mail, Remote Office, BLF/BLA, and more. By combining robust functionalities and advanced features, you will be able to reduce the communication cost, increase productivity, and enhance collaboration efficiency. Providing ranges of capabilities on PSTN connection for integrating with existing PBXs or connecting analog phones, VL1050 is all the SME need to get started easily at reasonable price.

### VL1050

**50 Subscribers**  
**20 Concurrent Calls**  
**4FXS / 4FXO**

- Supporting SIPv2
- Simple Installation & Management
- Auto Provisioning via IPv6
- Music on Hold & IVR
- Easy Migration to VoIP



**SIP based Small Business IP-PBX**

### Benefits

#### ▪ Various PBX Features

VL1050 provides the most frequently used basic PBX features such as Call Hold, Call Transfer, Call Pickup, and so on, and these features are implemented to be more conveniently used. Also, its advanced features such as IVR, Voicemail to E-mail, Call Conference, Call Park, and more, will help you improve your company's productivity.

#### ▪ Cost Saving from Call Charges

With VL1050, local call can be terminated through the integrated FXO module, while international calls or long distance calls can be routed through registered SIP numbers provided from the VoIP service provider. These features will reduce call charges so significantly.

#### ▪ Easy Migration to VoIP

VL series IP-PBXs are designed to enable convenient adoption when installed into any existing IP networks. VL1050 not only makes it very easy installing and upgrading of the entire IP telephony network through using IPv6, but also dramatically lower voice communication costs by using VoIP service.

#### ▪ Easy and Enhanced Management

User friendly Web UI of VL1050 makes system configuration and MAC(Move Add and Change) so easy. And through WEB browser based interface, it can be monitored and managed. Moreover, Remote Management feature will reduce the cost of provisioning and troubleshooting on systems in branch offices.

#### ▪ Outstanding Voice Quality and System Reliability

By applying our own various algorithms and technologies, VL series IP-PBXs even ensure voice quality of PSTN communication. And for safer system operation, these systems also have built-in temperature sensor, battery for power-failure, and PSTN backup to ensure their operational reliabilities.

# Specification

## Basic PBX Features

- Call Hold/Unhold
- Call Transfer (Blind/Attended)
- Call Forwarding (Always/Busy/No-Answer/Error/Time-Based)
- Call Pickup (Direct/Group)
- Call Park/Unpark
- Intercom (Direct/Group)
- Threeway Call
- Music on Hold
- Music on Ringback
- Group Ringing (Hunt/Circular-Hunt/Ring-All/Random)
- Distinctive Ringing
- DTMF Relay (in-audio/rfc2833/SIP Info)
- Flexible Dialplan
- SIP Trunking
- DID/DOD
- FXO backup (in case VSP is unavailable)
- Call Screening
- DND
- Virtual Caller ID
- Anonymous Caller ID
- Phonebook

## Advanced PBX Features

- Voicemail (with e-mail forwarding)
- Message Waiting Indication
- IVR
- Conference
- Call Recording
- RAA
- Feature Code
- SIP Messaging & Presence
- BLF
- PBX-to-PBX interoperability

## Security

- ACL
- DDoS Protection
- SIP DDoS Protection
- PBX-to-PBX interoperability thru VPN

## SIP

- SIP Basic (RFC 3261)
- Provisional Responses (RFC 3262)
- An Offer/Answer Model (RFC 3264)
- Event Notification (RFC 3265)
- Asserted Identity (RFC 3325)
- Instant Messaging (RFC 3428)
- Message Waiting Indication (RFC 3842)
- Presence (RFC 3856)
- Session Timers (RFC 4028)
- INFO Method (RFC 2976)

## Codecs

- IP
  - + Voice
    - G.711  $\mu$ /A-Law
    - G.729 A/B (pass-thru only)
    - G.723.1 (pass-thru only)
  - + Video (pass-thru only)
    - H.263
    - H.264
    - MPEG-4 SP/ASP
- Analog
  - + Voice
    - G.711  $\mu$ /A-Law
    - G.729 A/B
    - G.723.1

## FXO

- LEC (G.168)
- Caller ID Detection
- Call Progress Tone Detection
- DTMF Generation & Detection
- VAD/CNG
- Packet Loss Concealment
- Adaptive Jitter Buffer
- Dynamic Payload Support
- Adjustable Audio Frames per Packet

## FXS

- Battery Feeding for Analog Telephone
- Ringing Signal up to 3 LEN
- Type I/II FSK Caller ID Generation & Detection
- Call Progress Tone Generation
- DTMF Generation & Detection
- VAD/CNG
- FAX
  - + T.30 Receiving (only with e-mail forwarding)
- Configurable Tip/Ring impedance
- Hook Flash Signaling

## Management

- System Configuration via WEB Manager
- Multi Language Support (Korean/English/Turkish)
- Password Protection
- Configuration Backup/Restore thru WEB/FTP
- S/W Upgrade from Remote Place
- Direct Phone Management thru WEB
- IP-Phone Auto Provision
- Event Log
- Call Log
- CDR
- SNMPv2

## H/W

- CPU: Embedded 64bit Network Processor
- Memory: 256MByte DDR2 - SDRAM
- Storage: 1GByte Flash Disk

## Network Interfaces

- Ethernet: 2 Ports (100Mbps)
- PSTN: 4 Ports
- Analog Telephone Interface: 4 Ports

## Other Interfaces

- LED Status Indicators
- DC 12V Power Connector
- Earth Connector
- Life Line
- Restore Factory Defaults Button

## Power Consumption

- Max. Operational Power Consumption: 20 W

## Cooling Fan

- RPM: 4000, Air Flow: 4,480 CFM

## Battery for Power Failure

- 1.2V x 5 x 350mAH, NiMH

## Physical

- Dimensions: 250(W) x 200(D) x 55.4(H) mm
- Weight: 1.2Kg (without Power Adaptor)

## System Capacity

- Max. Extensions: 50 Subscribers
- Max. Call Performance: 2 call per second(CPS)
- CDR Database: up to 20MByte records

## Ethernet Interfaces

- WAN/LAN: 100Base-TX complying IEEE 802.3 Standards supports Auto-Negotiation
- RJ45 Connector: Ethernet packets over CAT5-UTP cable

## PSTN Interface

- 2 Pin(Tip-Ring) RJ11 Connector for each PSTN port
- Up to 3KV Line Isolation and Surge Protection
- TX power of up to +10 dBm into 600Ohm
- Ringing Detection
- CID Monitoring and Detection
- Parallel Phone Detection

## Environmental

- Operating Temperature: 0°C ~ 50°C
- Operating Humidity: 20% ~ 80% RH
- Storage Temperature: -20°C ~ 60°C
- Storage Humidity: 20% ~ 95% RH

## Application Diagram

