

WellGate 2504

4-line FXS SIP IP Gateway



WellGate 2504 front view



WellGate 2504 rear view

Dual IP Stack : IPv6 and IPv4 Simultaneously

Support up to 4 SIP proxy Servers

Support different SIP Trunk to each FXS line

Auto HTTP Provision feature

Flexible Routes Plan and Dial Plan

Redundant Firmware Image

WellGate 2504 is an 4-line FXS gateway with SIP protocol IP device which allows to connect 4 sets of analog telephone sets to make or receive VoIP call over Internet or VPN network through Internet Telephony service provider. This device is suitable for office user through ITSP service provider to install at office or branch office to call between different offices. It also can install at trunk line in front of digital PBX to migrate digital PBX to IP Telephony call.

To select up to 4 SIP service Accounts

WellGate 2504 is appropriate to use four VoIP Service Providers, IP Centrex service and IP-PBX within offices and remote branch offices. One of four SIP Servers (or ITSP Service provider or alternative IP-PBX) can be configured freely at each line (FXS port) to make or receive IP Call. It provides 4 service platforms to select lowest rate according to your dial number or country.

IPv6 VoIP Gateway is ready to Market

IPv6 address was developed for years, however, it was not practical to our life up to date. More and more electronic devices are able to link to IP Network, this makes existing IPv4 address supply in shortage to global market. Meanwhile, the emerging countries are not able to increase IPv4 address supply due to strong market demand on broadband services. WellGate 2504 is an SIP based FXS gateway which built-in both IPv6 and IPv4 IP address. No matter when you are ready to deploy IPv6 network now, or reserve the future expansion to IPv6 from existing IPv4 address, WellGate2504 is ready to grow up with you. Both IPv6 and IPv4 address are working simultaneously at Voice IP Call. Its flexibility of both IPv6 and IPv4 accept and interwork both addresses on today and tomorrow whenever you need.

Flexible Dial plan and Route Plan Features

WellGate 2504 provides flexible Dial Plan from FXS to IP Trunk (SIP Softswitch). Dial Plan is to configure in what condition the digits can be sent out to IP network. The dial inter digit time before dialing is configurable to meet busy users or home user. Dial Rule is able to detect the prefix code and maximum digits reached and then dial automatically. The Digit Manipulation (DM) allows you to configure matched prefix code, digits length, start and stop digit position to be replaced digits as well.

Route Plan is to configure the incoming and outgoing call routes which you desired this call to go out or allow to income. For instance, IP incoming call may Ring to FXS port with Priority, Cyclic or Simultaneously ring . You can also configure IP incoming call by Matched prefix digits, Matched incoming FXS line number and Matched digit length. For FXS outgoing call

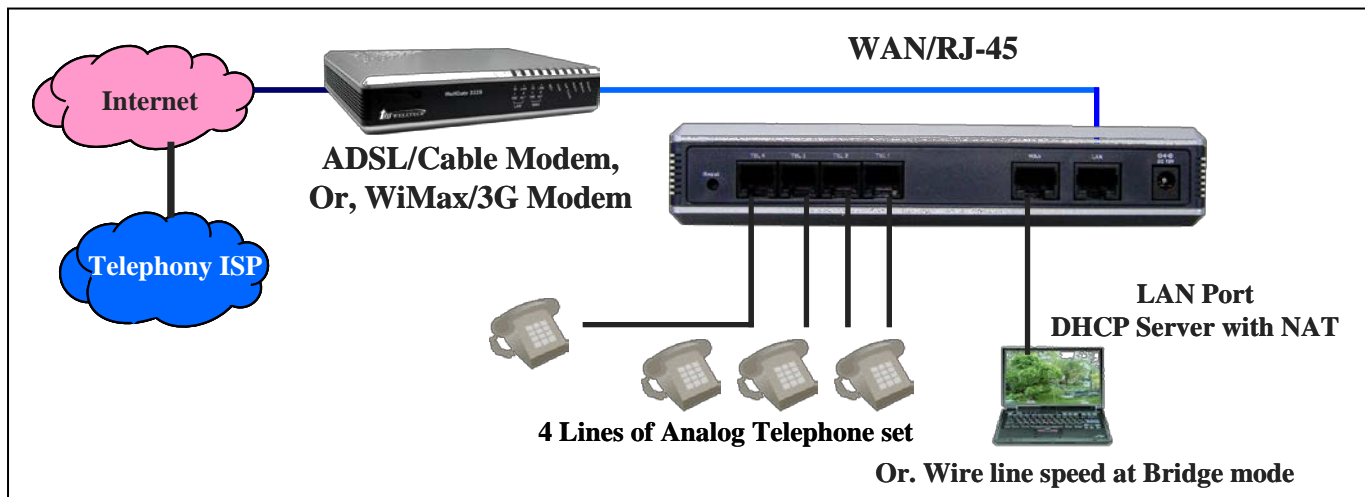
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routes, the hunting type supports Priority, Cyclic or Simultaneously ring and select which SIP trunk (SIP Proxy Server) to go. FXS outgoing call routes also support by Matched prefix digits, Matched incoming FXS line number and Matched digit length. Both direction supports No Answer time out and Backup Routes.

Suit to IP Telephony Service Provider

WellGate 2504 is a SIP IP device to connect with existing analog telephone set to make IP call. Its compact design and easy installation allow office user or single user to make or receive call just like an legend telephone call but less cost. It is compatible with broadband internet service device such as ADSL/Cable Modem and WiMax/3G Modem. It helps ISP provider to provide Telephony service to existing customer without additional cable.



SPECIFICATION

Interface:

Ethernet port (RJ-45, 10/100 base-T)
1-WAN port, connect to IP Network
1-LAN port connect to PC with NAT
Support Bridge, NAT and Gateway mode
Telephony port (RJ-11 x 4 pcs)
DC +12V power input Jack
Reset key to return Factory setting
LED Indicator for System, SIP and FXS status

IP Network connection

IPv4 (RFC 791) and IPv6 Simultaneously
IPv6 Auto Configuration (RFC 4862)
IPv6 Only, IPv4 Only or dual stack
MAC Address (IEEE 802.3)
MAC Clone Setting
Vendor Class ID
IP/ICMP/ARP/RARP/SNTP
Static IP
DHCP Client (RFC 2131), WAN port
DHCP Server, LAN port
NAT Server (RFC 1631)
PPPoE Client
DDNS (DynDNS)
DNS Client
Firewall
URL Filter
IP Filter
MAC Address Filter
Application program Filter

Port Filter
Port Forwarding
Bandwidth Control (Download and Upload), Maximum Bandwidth priority setting
UPnP Server at LAN port
Behind NAT, use DMZ for NAT traversal
SNTP with time zone and Daylight Saving
TCP/UDP (RFC 793/768)
RTP/RTCP (RFC 1889/1890)
IPV4 ICMP (RFC 792),
TFTP Client
VLAN Support 802.1Q, 802.1P
VLAN ID Range : 2 to 4094
VLAN Priority : 0 to 7
QoS : DiffServ (RFC 2475), TOS (RFC791, 1394)

SIP Protocol :

RFC3261 compliance
Support up-to 4 SIP Server Register Accounts
SIP UDP Protocol
Support SIP compact Form
Support SIP HOLD Type
SIP Session Timer (RFC 4028)
MD5 Digest Authentication (RFC2069/RFC2617)
Reliability of provisional response PRACK (RFC3262)
Early/Delay Media support
Offer/Answer (RFC3265)
Message Waiting Indication (RFC3842)
Event Notification (RFC3265)
REFER (RFC3515)

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Support Outbound Proxy
Support Primary and Backup SIP Server
Support STUN NAT Traversal
Support "rport" parameter (RFC 3581)

Audio Codec :

G.711 A-law/ μ -law, G.729A, G.723.1 (6.3K, 5.3K)
Select voice codec priority : Local or Remote
Silence Suppression
VAD/CNG
LEC : Line Echo Canceller
Max Echo Tail Length (G.168): 32, 64 and 128ms
Packet Loss Compensation
Automatic Gain Control
In-band/out of band DTMF (RFC4733, RFC2833 / SIP INFO)
Adaptive/Configurable Jitter Buffer
G.168 Acoustic Echo Cancellation
Phone Book (50 records) for peer to peer calls
Dialing Plan with drop, replace, Insert dialing digits
Select First digit and Inter digit timeout duration (Sec)
Selectable Call Progress Tone
Support Specified Line Calling

Call Features :

Caller ID display DTMF (before/after 1st ring) and FSK (before 1st ring), ETSI and Bellcore
DTMF Caller ID start and stop BIT configurable
Polarity Reversal before Caller ID or not
Tone Generation: Ring, Ring Back, Dial, Busy, call waiting, ROH, Warning, Holding, Stutter dial tone and disconnect tone
Configure Tone Frequency, Cadence, Level and Cycle
Global Country Based Tone Specification
NAT Traversal support STUN, UPnP and Behind NAT
Out-Band DTMF : RFC2833 and SIP Info
Flash Time transmit via SIP Info (Enable or Disable)
Message Waiting Indication (Stutter Tone Notice)
Speed Dialing
Call Waiting/Switching between Calls
Call Forward (Busy, Unconditional, No Answer)
Block Anonymous Call
Call Hold
Call Transfer
Retrieve transfer call from 3rd party by dial Code (default: *#)
Flexible Dial Plan
Dial Rule : Prefix and Maximum digits, digit position to replace
Digit Manipulation (Drop and Replace Rule)
Extension Hunting
Hot Line
Support SIP Trunk up 4 SIP Servers
Outgoing SIP Caller ID Selection
Accept desired SIP Proxy incoming calls Only
Flexible Routing Plan
Prefix Match and Length
Priority Ring
Cyclic Ring

Simultaneous Ring
Programmable Hunting Cycle
Backup Routing with Digit Manipulation
Default Routing

T.38 FAX
Support Peer to Peer Dialing
Flash Time Detection: range from 80 to 800 ms
ON-HOOK Voltage -48Vdc
Configure Ring Cadence, Frequency and Voltage
Support Polarity reversal for Billing
Service Up to 1 Kilo-meter distance to analog telephone set
Generate Current Drop Time (Open Loop Disconnect time)

MANAGEMENT :

Administrative Telnet CLI and HTTP, HTTPS
http provision through MAC address
Multilingual Web User Interface
3 Levels of User Access Right with Password protection
(Administrator, Supervisor and User)
HTTP/HTTPS Service Access limitation from WAN port
Provides System Status Logs
Status display: Network, Line, SIP Trunk status
Diagnostics (debug through Syslog Event Notice)
Debug in real time by Telnet
Auto Provision via HTTP Server
Support SNMP V2/Trap
Configuration Backup/Restore
Dual Firmware Image Backup
Reset to factory Default
** Support Welltech proprietary encryption protocol at SIP Signal and Voice codec during transmitting to IP network in order to Anti-ISP block of VoIP call. This feature only be available with Welltech SIP server or SIPPBX6200 IP-PBX

Environmental :

Dimension: 17.5(W) × 3.2(H) × 12.6(D) CM
Weight: 0.9kg (One unit with packing)
Operating Temp. & Humidity
- Temp.: 0°C~45°C (32°F~113°F)
- Humidity: 10%~90% relative humidity, non-condensing
Power Adaptor:
- INPUT: AC100V~240V, 50/60Hz
- OUTPUT: DC 12V, 1.5A
- 15 Watts

Approvals:

CE, FCC (Part 15, Class B), LVD and RoHS

Country of origin:

Made in Taiwan

Packing Accessories

WellGate 2504	x 1 pcs
AC to DC+12V Power adaptor	x 1 pcs
CD User Manual	x 1 pcs

Warranty

One year

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Comparison Table between WellGate 3504A and WellGate 2504

	IPv6	SIP	H.323	NAT for WAN/LAN	Routes and Dial Plans	Rich Telephony Features	Enclosure
WellGate 2504	YES	YES	NO	YES	YES	YES	Metal Black
WellGate 3504A	NO	YES	YES	NO	NO	NO	Metal White