WellGate 3232s

32-port FXS SIP IP Gateway

WellGate 3232s 32 ports FXS gateway photo

WellGate 3232s cable connection

Dual IP Stack : IPv6 and IPv4 Simultaneously
Support up to 32 FXS extensions in one IP address
Support up to 16 SIP Trunk Servers
Both RJ-21 Female Telecom connector and RJ-45 4-FXS Socket
Flexible Routes Plan, Dial Plan, Digit Manipulation
Consistent with WellGate 2504, 2808 and 2424S gateway

WellGate 3232s is a 32-port FXS gateway with SIP protocol IP device which connects 32 Lines of analog telephone sets or connect to analog CO line of legend PBX to make or receive VoIP call over Internet or VPN network. This device is suitable for office IP-PBX application between office to office or office to branch office to call via PSTN Line and IP network.

To select up to 16 SIP TRUNK Accounts

WellGate 3232s is appropriate to use 16 VoIP SIP Trunk or IP Centrex service or IP-PBX within offices and remote branch offices. One of 16 SIP Servers (or ITSP Service provider or alternative IP-PBX) can be assigned to WellGate 3232s to make or receive IP Call. It provides up to 16 SIP Trunk numbers for this gateway to use.

Flexible Dial plan and Route Plan Features

WellGate 3232s provides flexible Dial Plan between FXS and SIP IP Trunk (SIP Soft Switch or IP-PBX). Dial Plan is to configure in what condition the digits can be sent out to/from IP network. The dialing inter-digit time before dialing is configurable to meet local PSTN line or PBX's extension line. 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 want this call to go out or allow to income. For instance, IP incoming call may reach to one FXS port with Priority or Cyclic access. You can also configure IP incoming call by
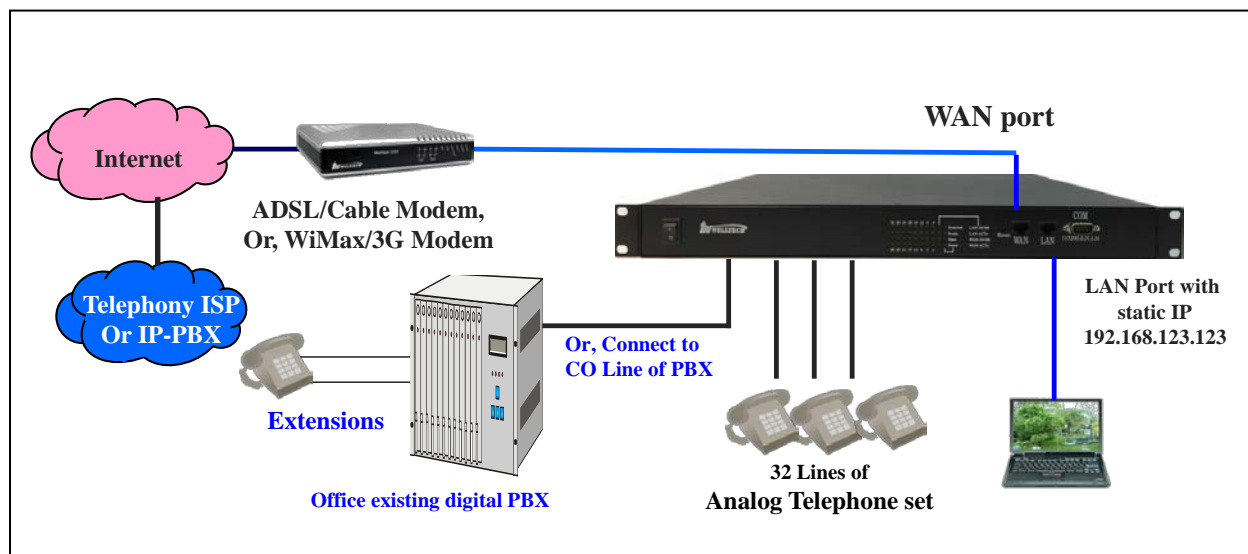
Matched prefix digits, matched dialing number to FXS line and Matched digit length. From FXS outgoing call to SIP IP routes, the hunting type supports Priority or Cyclic or simultaneously select which SIP trunk (SIP Proxy Server, or IP-PBX) to go. FXS outgoing call routes also support by Matched prefix digits, Matched outgoing SIP Trunk number and Matched digit length. Both directions support No Answer time out and Backup Routes.

Suit to IP-PBX IP calls

WellGate 3232s is a SIP IP device to connect with analog telephone set and register to IP-PBX (or SIP Server IP Telephony platform) to make or receive IP call without affecting existing cabling, extension number or dial behaviors. It is an easy and quick way to upgrade from existing PBX to VoIP calls by using existing cable layout and dial number plan.

SPECIFICATION

Interface:
Ethernet port (RJ-45, 10/100 base-T):
  1-WAN port, connect to SIP IP Network
  1-LAN port connect to Computer to configure
Telephony port:
  RJ45 x 8 pcs, Each RJ45 socket contain 4 pairs of FXS.
  RJ-21 Telecom connector (Female) x 2 pcs.
RS-232 Console port, DB9 Male, 115200 bps
AC power input Jack
AC Power ON/OFF Switch
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
Static IP at LAN port for computer to access
PPPoE Client
DDNS (DynDNS)
DNS Client
Firewall
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
VoIP VLAN Support 802.1Q, 802.1P
VLAN ID Range: 2 to 4094
VLAN Priority: 0 to 7 (Highest Priority)
QoS : DiffServ (RFC 2475), TOS (RFC791, 1394)

SIP Protocol :
RFC3261 compliance
Support up-to 16 SIP Trunk to Register
SIP UDP Protocol
Support SIP compact Form

2

WellGate 3232s

32-port FXS SIP IP Gateway

Support SIP HOLD Type: Send Only, 0.0.0.0 or inactive
SIP Session Timer (RFC 4028)
SIP Session Refresher: UAC or UAS
SIP Encryption
MD5 Digest Authentication (RFC2069/RFC2617)
Reliability of provision response PRACK (RFC3262)
Early/Delay Media support
Offer/Answer (RFC3264)
Message Waiting Indication (RFC3842)
Event Notification (RFC3265)
REFER (RFC3515)
Support Outbound Proxy
Support Primary and Backup SIP Server
Support STUN NAT Traversal
Support "rport" parameter (RFC 3581)
Configure SIP local Port
SIP QoS Type: DiffServe or QoS
Accept Proxy Only : YES or NO

Audio Codec :
G.711 A-law/μ-law, G.729A, G.723.1 (6.3K, 5.3K)
Select voice codec priority: Local or Remote
Voice Payload size (ms) configuration
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
Configure RTP basic Port
RTP QoS Type: DiffServ or TOS
Phone Book 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 :
Support Peer to Peer Dialing
Up to 8-port FXS connects to analog phone set or analog trunk of PBX.
Caller ID generates DTMF (before/after 1st ring) and FSK (before 1st ring), ETSI and Bellcore
DTMF Caller ID start and stop BIT configurable
Current Drop generation to FXS analog devices
Disconnect tone generation
Tone Generation: Ring Back, Dial, Busy, call waiting, ROH, Warning, Holding, Stutter dial tone and disconnect tone
Configure Tone Frequency, Cadence, Level and Cycle
Select Tone specification by Country name List
Global Country Based Tone Specification
NAT Traversal support STUN, UPNP and Behind NAT
Out-Band DTMF : RFC2833 and SIP Info
RFC2833 Payload type : 101 or 96

DTMF send out ON and OFF Time configure
DTMF incoming recognition Minimum ON and OFF time
DTMF Relay Volume configuration
T.38 FAX Volume configuration
Flash Time transmit via SIP Info (Enable or Disable)
Message Waiting Indication (Stutter Tone Notice)
Block Anonymous Call
Call Hold
Call Transfer
Outgoing SIP Caller ID Selection
Support 16 SIP Trunk
Accept desired SIP Proxy incoming calls Only (Avoid hacker's call)

FXS Line Configuration:
Activate or deactivate
Line ID
Line Phone number
Polarity Reversal generation for call establish and Billing.
Current drop generation to release line
Incoming call Handle: Hotline or 2 stage dialing
HOT Line to desired phone number
Recognize FLASH TIME from analog device
T.38 or FAX Relay Type
Incoming and outgoing volume in dB configurable
Dialing Answer Delay time to establish call path
Caller ID generation mode by Country selection

Flexible Routing Plan :
Prefix Match and Length
Priority Ring
Cyclic Ring
Simultaneous Ring
Programmable Hunting Cycle
Backup Routes with Digit Manipulation
Default Routes

Flexible Dial Plans :
Retrieve transfer call from 3rd party by dial Code (default: *#)
Inter digit time out setting
First digit dial out delay time setting
End of dial keypad number
Dial Rule : Match dial Prefix and Maximum digits length (1-15)
Phone Book can be Exported or Imported

Digit Manipulation (Drop and Replace Rule):
FXS DM Group
VoIP DM Group
DM 1 Group
DM 2 Group
DM 3 Group
DM 4 Group
Matched Prefix
Matched digit length
Replace digit start position
Replace digit stop position
Replace number

3

WellGate 3232s

32-port FXS SIP IP Gateway

FXS Analog 2-wire interface:
Flash Time Detection: range from 80 to 800 ms
ON-HOOK Voltage -48Vdc
Support Polarity reversal to start 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 with
    different Web Language (Administrator, Supervisor and User)
HTTP/HTTPS Service Access limitation from WAN port
Configure Service ports at HTTP, HTTPS and telnet Services
Phone Debug Module: Device Control, Call Control, DB, Verbose
SIP Debug Module: Register, Call, SIP Message, Others
SNTP Debug Module
Device Debug Module
DSP Debug
Provide 8 Debug Levels :
        Emergency
        Alert
        Critical
        Error
        Warning
        Notice
        Information
        Debug
Provides System Status Logs
Connect to external SYSLOG Server

Status display: Network, Line, SIP Trunk status
Diagnostics (debug through Syslog Event Notice)
Debug in real time by Telnet
Auto Provision via HTTP Server
SNMP V2/Trap
Configuration Backup/Restore
Dual Firmware Image Backup
Reset to factory Default

Environmental :
Actual Dimension: 48(W)×4.4(H)×40(D) CM
Packing Dimension: 60 x 16 x 58 CM
Packing Weight: 8.3kg (One unit)
19-inch, 1U chassis with Relay Rack Mount Bracket
Operating Temp. & Humidity
    - Temp.: 0°C~45°C (32°F~113°F)
    - Humidity: 10%~90% relative humidity, non-condensing
Power Input: AC100V to 240V, 50/60Hz
Power Consumption: 195 Watts.

Country of origin:
Made in Taiwan

Packing Accessories
WellGate 3232s Gateway   x 1 pcs
Relay Rack Mount Bracket   x 2 pcs
AC Power cable   x 1 pcs

Warranty
One year