

WellGate 2880

8-port FXO SIP IP Gateway



WellGate 2880 Front View



WellGate 2880 Rear View

Dual IP Stack : IPv6 and IPv4 Simultaneously
Support up to 16 SIP Trunks to register
Enhance existing PABX to VoIP Call
Consistent with WellGate 2540 and 24240 gateway
Flexible Routes Plan, Dial Plan, Digit Manipulation
Redundant Firmware Image

WellGate 2880 is 8-port FXO gateway with SIP protocol IP device which connects up to 8 Lines of analog PSTN telephone line (or extensions of PABX), to make or receive VoIP call over Internet or VPN network. This device is not only suitable for legend PABX to enable VoIP call without changing existing cabling, dial plan, and extension number, but also work with IP-PBX and SIP Server directly. Its design, firmware, auto provision and webpage are consistent with WellGate 2540 (4 ports FXO) and WellGate 24240 (24 ports FXO) gateway.

To select up to 16 SIP TRUNK Accounts

WellGate 2880 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 configured freely at each line (FXO port) to make or receive IP Call. It provides 16 service platforms according to your dial number or routes plan.

IPv6 VoIP Gateway is ready to Market

IPv6 address was developed for years, however, it was not practical to our life up to now. More and more electronic devices are able to link to IP Network(for instance, Internet of Things, IoT). This makes existing IPv4 address supply in short to global market. Meanwhile, the emerging countries are not able to increase IPv4 address supply due to strong market demand on broadband services. WellGate 2880 is an SIP based FXO gateway which was built-in both IPv6 and IPv4 IP address. Whenever you are ready to deploy IPv6 network, or reserve the future expansion to IPv6 from existing IPv4 address, WellGate 2880 is ready to grow up with you. Both IPv6 and IPv4 addresses 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.

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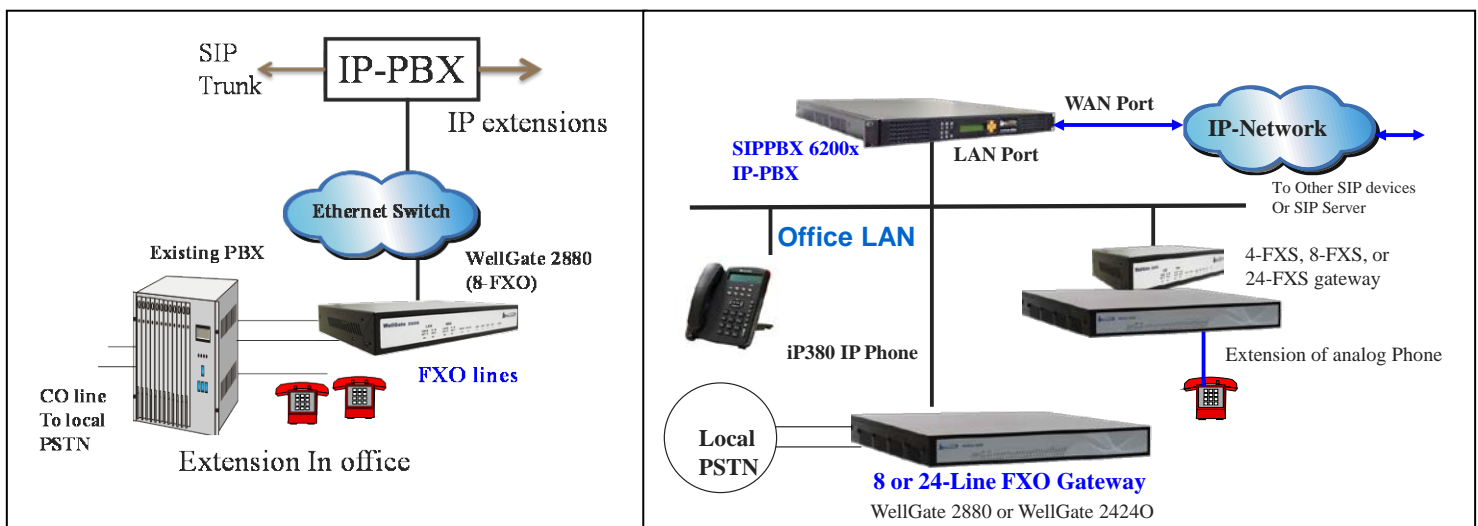
Flexible Dial plan and Route Plan Features

WellGate 2880 provides flexible Dial Plan between FXO 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 FXO port with Priority or Cyclic access. You can also configure IP incoming call by Matched prefix digits, matched dialing number to FXO line and Matched digit length. From FXO outgoing call to SIP IP routes, the hunting type supports Priority or Cyclic or Simultaneously to select which SIP trunk (SIP Proxy Server, or IP-PBX) to go. FXO 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.

Upgrade existing PABX to enable VoIP call

WellGate 2880 is a SIP IP device to connect with existing PABX and enable to make or receive VoIP call without affecting existing cabling, extension number or dial behaviors. It is an easy and quick way to upgrade existing PABX to VoIP calls. No need to expand your PABX's extension lines and analog trunk lines. FXO lines can be connected with extensions of PABX in order to talk with remote office via IP.



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 connect to PSTN line (RJ-11 x 8 pcs)
DC +12V power input Jack
LED Indicator for System, SIP and FXO 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



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Application program Filter
Port Filter
Port Forwarding (TCP, UDP or both)
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
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 Trunks to Register
SIP UDP Protocol
Support SIP compact Form
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 (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 :

Support Peer to Peer Dialing
Up to 8-port FXO connects to PSTN Line or extension of PBX
Caller ID recognition DTMF (before/after 1st ring) and FSK (before 1st ring), ETSI and Bellcore
DTMF Caller ID start and stop BIT configurable
Current Drop Detection to release FXO port
Disconnect tone recognition to release FXO port
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

FXO Line Configuration:

Activate or deactivate
Line ID
Line Phone number
Polarity Reversal detection for call establish and Billing.
Current drop recognition to release line
Incoming call Handle: Hotline or 2 stage dialing
HOT Line to desired phone number
Play voice file to incoming call
Repeat playing voice file counts
Self-recorded voice files to upload
Generate FLASH TIME to PSTN network
T.38 or FAX Relay Type
Incoming and outgoing volume in dB configurable
Dialing Answer Delay time to establish call path
Answer PSTN incoming call after how many ring cycles
Caller ID detection mode by Country selection
VoIP dial to FXO/PSTN Line: 1 stage dialing and 2 stage dialing
Outgoing SIP Caller ID Selection
Support 16 SIP Trunk
Accept desired SIP Proxy incoming calls Only (Avoid hacker's call)

Flexible Routing Plan :

Prefix Match and Length
Priority Ring
Cyclic Ring

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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):

FXO 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

FXO Analog 2-wire interface:

Incoming Ring frequency recognition range: 10 to 70 Hz
Incoming Ring ON time recognition range: 0 to 8000ms
Incoming Ring OFF time recognition range: 0 to 8000ms
Incoming Ring Level recognition range: 10 to 95Vrms
Flash Time Detection: range from 80 to 800 ms
Configure Ring Cadence, Frequency and Voltage

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

Environmental :

Physical Dimension: 44(w) x 4.5(h) x 11(d) CM.
Weight: 2.3kg (One unit with packing)
Operating Temp. & Humidity
- Temp.: 0°C~45°C (32°F~113°F)
- Humidity: 10%~90% relative humidity, non-condensing
Maximum Power Consumption: 17 Watts (1.5A at 12Vdc)
Power Adaptor:
- INPUT: AC100V~240V, 50/60Hz
- OUTPUT: DC 12V, 3.0A

Approvals:

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

Country of origin:

Made in Taiwan

Packing Accessories

WellGate 2880 main unit	x 1 pcs
AC to DC+12V Power adaptor	x 1 pcs
Rack Mount bracket	x 2 pcs

Warranty

One year