

## **RGW96 Analog VolP Gateway**



#### RGW96

Max. FXS/FXO ports: 96
Max. concurrent calls: 96

#### **Product Models**

With its modular design, the capacity of RGW96 can be flexibly expanded by mixing up to 4 FXS/FXO interface cards, as listed below. Interface cards: 24FXS, 24FXO, 16FXS+8FXO, 12FXS+12FXO

### **Features**

- SIP/MGCP protocols
- 500 routing and number manipulation rules
- Fax over IP using T.38 & G.711 pass-through
- Hot-swappable FXS/FXO interface card
- Dual redundant gigabit Ethernet ports
- Dual AC/DC power supplies available
- PSTN failover
- Auto provisioning
- Remote access via the Redstone Cloud\*
- Management with Redstone or third-party Remote Device
   Management Systems (TR-069, SNMP)
- Interoperability with popular SIP servers, such as Cisco CallManager/CUCM, Broadsoft, Microsoft Skype for Business (Lync), and Asterisk/Elastix
- Class I lightning protection

The RGW96 series is a cost-effective, high-performance VoIP gateway with up to 96 FXS and FXO ports, targeting multi-tenant, large contact center and enterprise telephone communication applications, in which reliability and easy maintenance are critical.

Powered by innovative VoIP technology from Redstone, the RGW96 allows users to apply it as an N-to-1 system capable of connecting analog phone, fax and POS machine, IP telephony, and PSTN.

## **Comprehensive Feature Set**

As an intelligent gateway running on embedded Linux operating system, the RGW96 supports an advanced feature set such as call forward, call transfer, 3-way calling, caller ID, DND, color ringback, call forking, automatic routing, Digitmap and much more, to provide a complete and highly reliable VoIP solution applicable to most scenarios

## **Carrier-class Reliability**

RGW96 supports high availability configuration including SIP registration failover, load balance as well as PSTN failover, with reliable 1+1 redundancy of gigabit Ethernet ports and power supplies (optional), ensuring no loss of service and minimizing the communications downtime.

## **Easy Remote Management**

Embedded with the Redstone Cloud client, the device located behind enterprise NAT or firewall can be easily accessed for maintenance and troubleshooting purpose or by far-end applications. Real time monitoring, alarm notification, remote packet capture and software upgrading can be performed with the Redstone or third-party Remote Device Management Systems connecting over TR-069 or SNMP protocol.

#### **Investment Protection**

Investment protection is a significant part of Redstone VoIP product development focus, providing better returns for the customers who invest in VoIP products by maintaining compatibility with newest VoIP technologies via software upgrading, avoiding repeated investments.

<sup>\*</sup> The Redstone Cloud is based on Amazon.



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## **Specification**

Protocols

Call control SIP/UDP and SIP/TCP (RFC3261), IMS (3GPP),

MGCP (RFC3435)

Network Telnet, SSH, HTTP, HTTPS, DHCP/PPPoE

client, Radius, DNS (A/SRV record), STUN

Media Processing

Caller ID Bellcore Type 1&2, ETSI, BT, NTT, and

DTMF-based CID

Codec G.711 (a/µ), G.729a, G.723.1, GSM, iLBC

**DTMF** In-band audio, RFC2833, SIP-INFO

Hook-flash Local processing, RFC2833, SIP-INFO

Fax over IP T.38, G.711 pass-through

T.38 compliant Group 3 Fax Relay

Maximum fax rate of 33,600 bps (pass-through)

Disconnect modes Polarity reversal, Busy tone detection, Loop current

Voice quality Echo cancellation (G.168-2004), Jitter buffer, enhancement

Silence suppression (VAD, CNG), PLC

Voice

**Call transfer** Blind transfer, Consultative transfer

Call forward all, Call forward no answer, Call

forward busy

Call recording

storage

Remote recording server for storage

**Call settings** Routing based on the caller or callee number,

Digitmap, 3-way calling, Speed dialing, Do not disturb, Call forking, Color ringback tone, Hunt group,

Ring cadence, Message Waiting Indicator (MWI)

Security

User-defined ports SIP port, RTP port, HTTP/HTTPS port to access

the Web GUI

Access list IP addresses allowed to access HTTP/HTTPS/

Telnet/SSH service

VoIP SIP-allowed IP addresses
Encryption Encrypted password/PIN

Intrusion prevention Ping blocking

QoS

QoS DiffServ、TOS、802.1P/Q VLAN

High Availability

**Redundancy** Primary-Standby, Active-Standby, Load balancing

Failover PSTN failover upon power or network failure

**Provisioning, Administration and Maintenance** 

Device management Redstone Remote Device Management

System, TR069 management (TR-069,

TR-104, and TR-106), SNMP

Remote access

over TCP

Redstone Cloud

**Auto provisioning** Download configuration file via TFTP/FTP/

HTTP/HTTPS, Obtaining ACS address via

DHCP option 66 or redirection

Log management 8-level logs, Syslog

Data capture Port capture, Packet capture

Status and statistic Call status and history, Device status monitoring

and statistics collection

Upgrade Firmware upgrade via Web GUI

#### **Hardware**

CPU	1 GHz
Voice DSP module	200 MHz, 3 to 12 modules
RAM	256 MB, DDR3
FLASH	32 MB
H×W×D	85 × 440 × 300 mm
Weight (net)	6.32 kg maximum
Single/Dual AC power supplies	100 to 240 VAC, 50/60 Hz, 2A maximum
Single/Dual DC power supplies	-36 to -72 VDC, 4A
Power consumption	110 W
Mounting	Rack
Operating	Temperature: 0 to 40°C Humidity: 10 to 90% RH (non-condensing)
Storage	Temperature: -40 to 70°C Humidity: 5 to 90% RH (non-condensing)



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