![Redstone Systems logo]

RGW404

4 FXS ports

Max. concurrent calls: 4

Features

- IMS/SIP/MGCP protocols
- Unequalled configurability of FXS and FXO ports
- TLS/SRTP
- L2TP/OpenVPN client
- 500 routing and number-manipulation rules
- Configurable SIP ports and IP-address whitelist
- High-speed fax with maximum rate of 33,600 bps by T.38 or G.711 pass-through
- Polarity-reversal/busy-tone detection
- High availability & PSTN failover
- Auto provisioning
- Remote access via the Redstone Cloud*
- Management with the 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 Redstone Cloud is based on Amazon.

RGW404 Analog VoIP Gateway

Developed for low-port-count applications, such as fax-terminal connectivity, small businesses, SOHO, and residential IP-telephony applications, the RGW404 analog VoIP gateway is integrated VoIP-FoIP devices that provide reliable and cost-efficient access methods for deploying converged communication solutions for network operators and enterprises.

The RGW404 is designed as a compact unit with 4 FXS ports, 1 WAN port and 1 PC port (both are 10/100/1000Mbps Ethernet ports), which allows users to apply it as an All-in-One system capable of providing versatile solutions by connecting analog phone, fax and POS machine, IP telephony and PSTN.

Comprehensive Feature Set with Intelligent Engine
As an intelligent gateway running on embedded Linux operating system, the RGW404 is compatible with many highlighted features such as call forward, call transfer, 3-way conference, caller ID, DND, color ringback, forking, automatic routing, digitmap, PSTN failover, and much more to provide a complete and highly reliable VoIP solution applicable to nearly every application scenarios.

High Reliability
The hardware design of the RGW404, from architecture to component selection, is made to optimize reliability.
In addition, with high availability featuring primary-standby, active-standby, and load balancing, as well as PSTN failover to handle the failure of the SIP proxy servers, power supply, and network, users are provided with carrier-class availability with minimized potential downtime.

Robust Protection against Intrusions
The RGW404 provides rich set of features to support perimeter protection against malicious intrusions, such as brute force logins and SIP attacks, ensuring a high level of security in your IP telephony environment.

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.

Specification	
Protocols	
Call control	SIP/UDP and SIP/TCP (RFC3261), IMS (3GPP), MGCP (RFC3435)
Network	SSH, HTTP, HTTPS, DHCP/PPPoE client, Radius, DNS (A/SRV record), STUN
Media Processing	
Caller ID	Bellcore/Telcordia, ETSI, BT, DTMF
Codec	G.711 (a/μ), G.729a, G.722, G722.2
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 (T.38)
Disconnect modes	Polarity reversal, Busy tone detection, Loop current
QoS	DiffServ, TOS, 802.1P/Q VLAN tagging
Voice-quality enhancement	Echo cancellation (G.168-2004), Jitter buffer, Silence suppression (VAD, CNG), PLC
Voice	
Call transfer	Blind transfer, Consultative transfer
Call forward	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, Digit map, 3-way calling, Speed dialing, Do not disturb, Call forking, Color ringback tones, Hunt group, Ring cadence, Message Waiting Indicator (MWI)
Security	
Protocol	HTTPS, SSH, TLS, SRTP
Encryption	Encrypted password/PIN
Intrusion prevention	Brute force login protection, Access list, Firewall, SIP-allowed IP addresses, Alarm and notification*
VLAN	Auto discovery via DHCP, Manual configuration
VPN client	L2TP, OpenVPN
High Availability	
Redundancy	Primary-Standby, Active-Standby, Load balancing
PSTN failover	Power failure, Network failure

Provisioning, Administration and Maintenance	
Device management	Redstone Remote Device Management System, TR-069 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 or Auto provisioning
Hardware	
CPU	Dual core，880 MHz
RAM	128 MB
Flash	16 MB
H×W×D (1U)	30 × 150 × 109 mm
Weight (net)	0.3 kg
Power	12VDC/1.5A
Power consumption	6 W
Mounting	Desktop
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)

Models		
RGW404	FXS	FXO
RGW40420	0	0
RGW40402	2	0
RGW40422	2	2
RGW40404	4	0
RGW40440	0	4