MX8A VoIP Gateway

Max. FXS ports: 8
Max. FXO ports: 8
Max. concurrent calls: 8

Functions and Benefits

- **Supports SIP/MGCP protocols**

- **Flexible configurations of FXS/FXO ports**

- **Outstanding security: Configurable SIP ports and IP address whitelist**

- **Supports IP/PSTN LCR selection**

- **Supports fax over IP using T.38 version 3 fax relay with V.34 and automatic switching between voice/fax**

- **Supports polarity-reversal/busy-tone detection**

- **Supports Auto Provisioning and TR069/SNMP**

- **Supports HA and PSTN failover**

- **Supports Class I lightning protection**

- **Compatible with standard SIP platforms, such as Cisco CallManager, Broadsoft, Microsoft Lync/OCS, Huawei IMS and Asterisk**

Developed for small businesses IP telephony applications, the MX8A gateway is an integrated VoIP device that provides reliable and cost efficient access methods flexible for deploying converged communication solutions for network operators and enterprises as well.

Powered by innovative VoIP technology from New Rock, MX8A is designed as a reliable and compact unit with 8 FXS/FXO ports, 1 WAN port, 1 PC port and 1 CON port, which 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, MX8A is compatible with many highlighted features such as call forward, call transfer, 3-way calling, 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 most scenarios.

Easy Operation and Management

With a simple-to-use Web-based configuration utility, MX8A allows users to perform routine maintenance, such as parameter configuration, data packet capture, call status monitoring, and firmware upgrade. The device also supports centralized management through Auto Provisioning, TR069 or SNMP to upgrade the firmware, change the configuration parameters, and download log files.

High Reliability

The hardware design of the MX8A, from architecture to component selection, takes full consideration of improving their reliability. In addition, with high availability featuring primary-standby, active-standby and load balance as well as PSTN failover designed to handle the failure of the SIP proxy servers, power supply and network, the users are provided with carrier class reliability with minimized potential downtime.

Investment Protection

Investment protection is a significant part of New Rock 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.

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Protocols	
SIP(RFC3261)	UDP, TCP for Microsoft Lync
MGCP	
IMS	
Network	Telnet, SSH, HTTP, DHCP Client, PPPoE Client, Radius, DNS

Media Processing	
Caller ID	Bellcore Type 1&2, ETSI, BT, NTT, and DTMF-based CID
Codes	G.711a/mu, G.729A
DTMF	Transparent transmission, RFC2833, SIP-INFO, Hook-flash events
Fax over IP	• T.38 compliant Group 3 Fax Relay up to 33.6kbps and auto-switch to T.38 from G.711 Fax pass-through • Fax data pump V.17, V.21, V.27ter, V.29, V.34 for T.38 fax relay • Support Smart Fax over IP (SFoIP) to make fax event more reliable
Disconnect methods	Busy tone, Polarity reversal/wink, Loop current
Echo cancellation	

Security	
User-defined ports	SIP, HTTP port to access the Web GUI, RTP
Whitelist	Whitelist of Web GUI and Telnet, IP address filtering of SIP
Encryption scheme	Encryption on SIP signaling or/and media streams
Ping blocking/unblocking	

QoS	
QoS	DiffServ, TOS, 802.1P/Q VLAN tagging

High Availability	
Redundancy	Primary-Standby, Active-Standby, Load balancing
Failover	PSTN failover on power or network failure

Remote Management	
Device management	TR069, SNMP
Auto provision	TFTP, FTP, HTTP, DHCP option 66

Features	
Call transfer	Blind transfer, Consultative transfer
Call forward	Call forward all, Call forward no answer, Call forward busy
Call control	Routing based on the caller or callee number, Digitmap, 3-way calling, Speed dialing, Do not disturb, Forking, Color ringback tone, Hunt group, Ring cadence, Message Waiting Indicator

Management	
Log management	Logs with 8 levels, Syslog
Packet capturing	Ethereal capturing, Port capturing
Configuration	Configuration file import/export, Resetting to the factory default
Status and statistic	Call status and history, device state monitoring and statistics collection
Version	Firmware upgrade via Web GUI

Hardware Specifications	
CPU	700MHz
RAM	128MB
FLASH	16MB

Physical Features	
Dimensions(H×W×D)	1.38 × 8.98 × 5.33 in. (35 × 228 × 135.5 mm)
Weight (net)	1.82 lb (0.83 kg) (Max.)
Power	12VDC/1.5A
Mounting mechanism	Desktop or rack

Environmental Requirements	
Operating	Temperature: 32 to 104°F (0 to 40°C), Humidity: 10 to 90% RH (non-condensing)
Storage	Temperature: -40 to 158°F (-40 to 70°C), Humidity: 5 to 90% RH (non-condensing)

Product model	FXS	FXO
MX8A-8S	8	0
MX8A-8FXO	0	8
MX8A-6S/2	6	2
MX8A-4S/4	4	4
MX8A-NA	0	0

Interface card model	FXS	FXO
MX8A-IF-4FXS	4	0
MX8A-IF-4FXO	0	4
MX8A-IF-2S/2	2	2

Back panel	
2 to 4 RJ11 ports	Connect to phones/fax machines or analog lines
1 RJ45 WAN port	10/100 Mbps
1 RJ45 PC port	10/100 Mbps
1 RJ45 CON port	Used for troubleshooting

FC CE