



## MX60E

Max. FXS/FXO ports: 48

Max. concurrent calls: 48

### Features

- SIP/MGCP protocols
- 500 routing and number manipulation rules
- Fax over IP using T.38 & G.711 pass-through
- Dual redundant Ethernet ports
- Dual DC/AC power supplies available
- PSTN failover
- TLS/SRTP
- Auto provisioning
- Remote access via New Rock Cloud (US: Youbiquity)
- Management with New Rock or third-party EMS (TR-069, SNMP)
- Interoperability with popular SIP servers, such as Cisco CallManager/CUCM, Broadsoft, Microsoft Skype for Business (Lync), Huawei IMS, VoS, FreeSWITCH and Asterisk/Elastix
- Class I lightning protection

The MX60E is a reliable, cost-effective, high-performance VoIP gateway with up to 48 FXS/FXO ports, designed to meet the needs of high-traffic contact center and enterprise applications.

The feature-rich MX60E allows users to consolidate analog phones, fax machines, and POS terminals, configurable with up-to-full concurrency over SIP trunks and the PSTN.

### Comprehensive Feature Set

As an intelligent gateway running on embedded Linux operating system, the MX60E supports an advanced feature set such as call forward, call transfer, 3-way calling, caller ID, DND, color ringback tones, call forking, automatic routing, digit map, and much more, providing a complete and highly reliable VoIP solution.

### Carrier-class Reliability

The MX60E provides high-availability configurations with SIP registration failover, load balancing and PSTN failover with optional 1+1 redundancy of Ethernet ports and power supplies, virtually eliminating downtime.

### Robust Protection against Intrusions

MX60E provides a 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.

### Remote Management and NAT Traversal

The MX60E includes the New Rock Cloud client, providing easy access with NAT traversal to endpoint devices and value-added applications for remote, real-time monitoring, maintenance, software upgrades, troubleshooting, data analysis, alarm notification, remote and packet capture.

## 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.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

**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** New Rock EMS, TR-069 management (TR-069, TR-104 and TR-106), SNMP

**Remote access over TCP** New Rock Cloud (US: YoubiquiTy)

**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

\* Roadmap feature

## Included Software

### Software

**Finder** Obtains IP addresses of devices in a LAN environment

**Telegreeting** Formats pre-prepared IVR audio files for uploads them into a device

**Recording Agent** Receives recording streams in PCM and converts them into MP3 format. Includes management functions such as search, play, delete and backup

## Hardware

CPU	1GHz
Voice DSP module	200 MHz, 2 to 6 modules
RAM	128 MB, DDR3
Flash	32 MB
H×W×D (1U)	44 × 440 × 260 mm
Weight (net)	3 kg maximum
Single/Dual AC power supplies	100 to 240V AC, 50/60 Hz, 1.2 A maximum
Single/Dual DC power supplies	-36 to -72V DC, 2A
Power consumption	60 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)

