

New Rock Technologies VoIP Gateways

MX120

VoIP Enterprise Voice Gateway



- Applications: IP-centrex, long distance By-pass, IPPBX, call center
- Flexible hardware configuration, easy system expansion (4 FXS-line or 4 FXO-line incremental)
- FXO Features: IVR, busy tone/caller ID detection, polarity reversal
- Support FAX (T.30/T.38), POS machine and modem
- 500 user configurable routing rules
- PSTN failover on power failure or network interruption

MX120 VoIP Gateway is the newest family in Newrock's MX series gateway products. It offers maximum capacity of 96 FXS lines and/or FXO lines, suitable for carrier and medium enterprise VoIP deployment.

Mx120 bridges legacy telecom terminal equipments, such as telephone, FAX machine, enterprise PBX, etc, into IP based voice network that constructed by the carrier or enterprise itself. When placed at network side connecting with PSTN switch, MX120 can be use to bring remote VoIP user into PSTN network. For IP based Call Centersolution, MX120 is the ideal remote access gateway for the operators. MX120 adopts modular design, can flexible configure FXS/FXO line capacity and DSP resource to gain best performance to cost ratio.

Mx120 designed with 1U (up to 48 analog lines) or 2U (up to 96 analog lines) high and 19" wide compact chassis. Full capacity system consumes maximum 125W power, and can be either 110-240V AC or -48V DC input.

Intelligent and Rich in Features

Mx120 adopts embedded linux operating system, supports SIP and MGCP.

Work as IP-Centrex access terminal, MX120 offers rich features, such as call transfer, call pick-up, conference, caller ID, fashion ring, fork ring, FAX3, Radius call record, 500 routing rule, number translation, PSTN line fail-over on power failure or network interruption, etc. This makes MX120 suitable for variety application requirement.

Easy to Operate and Maintain

Mx120 provides WEB based management GUI. Through WEB GUI, user can configure gateway parameters, upgrade firmware, download and upload configuration data, monitor status, and etc. MX120 also support other remote management methods, such as Auto Provisioning, Telnet and EMS.

High Interoperability

Mx120 has passed the interoperability tests with many softswitch and IPPBX suppliers worldwide. It can be deployed by carriers to provide IP-centrex service, and also works with Microsoft OCS 2007, Cisco CallManager, Nortel CS1000 to provide enterprises with Unified Communication solution.

Investment Protection

When choosing next generation communication equipment for IP network, cost reduction and investment protection are the main challenges. MX120 offers best performance to cost ratio. Through software upgrade, new VoIP function and standard can be continuously delivered to customers. The innovative design in MX120 supports smooth capacity upgrade from 48 lines to 96 lines. This saves customer initial investment, at the same time support feature business grow.

Carrier Class VoIP Gateways

MX120 Series

Specification

| System Features | |
|--------------------------|--|
| Hardware Configuration | 24-96 FXO and FXS ports in 4-line incremental |
| Voice Processing | Voice codec: G.711, G.729A, G.723.1, GSM, iLBC Echo cancellation: G.168 with 64ms echo tail Dynamic jitter buffer, voice activity detector (VAD), packet loss compensation QOS:TOS bits |
| Call Features | |
| Calling Type | Voice/FAX/Data |
| IVR Voice Prompt | FXO 2nd stage dialing |
| Encryption | Support many types of signaling and/or voice encryption |
| Call Handling | User configurable dialing plan, up to 500 routing rules |
| Fax Processing | T.30, T.38 fax relay |
| DTMF | RFC 2833, SIP INFO, audio |
| Billing | RADIUS, polarity reverse |
| User Feature | Call ID, call forwarding, call transfer, call fork, hotline, fashion ring, do not disturb, speed dialing, 3-way calling |
| Network | |
| Security | IP address screening |
| NAT Traversal | STUN, OPTIONS ping |
| Protocol | PPPoE, DHCP, DNS, DDNS, 802.1p, TFTP, telnet |
| Configuration/Management | |
| Web GUI | Configuration, firmware upgrade, system monitoring |
| EMS | Remote configuration, upgrade, alarming, traffice & statistic |
| Auto Provisioning | Auto configure/upgrad, provision server discover, TFTP, FTP, HTTP |
| Protocol and Standard | |
| Protocol | RFC3261, RFC3435, 3GPP TS 24.228, TS 24.229 |
| Standard | Caller ID (FSK/DTMF), configurable call progress tone plan |
| Hardware | |
| Central Processor | Freescale PowerQUICC MPC8247 |
| Digital Signal Processor | TI TMS320VC5509A |
| System Memory | 64MB/128MB |
| Flash Memory | 8MB/16MB |
| LED | Status for power, system, network and lines |
| Ethernet Connector | RJ-45, 10/100 Base-T, automatic crossover |
| FXO/FXS Connector | RJ-45 (4 line pairs following T568B scheme) |
| Max. User Line Length | 1500 meters |
| Ring Equivalent Value | 5 REN (short distance) |
| Power Supply | 100-240V AC, 50/60 Hz, 1A max |
| Power Consumption | Main chassis: 70W (Max) ; expansion chassis: 55W (Max) |
| Dimension (H x W x D) | 44 x 440 x 300 mm(single chassis) |
| Weight | Net: 3.9Kg. Gross (include package): 5.4Kg (single chassis) |
| Environment Requirement | |
| Operating | Temperature: 0 to 40°C. Humidity: 10% to 90% (non conducting) |
| Non Operating | Temperature: -10 to 60°C. Humidity: 5% to 90% (non conducting) |

* The value is measured under standard hardware configuration, may vary under different hardware configurations

| Model | FXS | FXO |
|--------------|-----|-----|
| MX120-72S | 72 | 0 |
| MX120-96S | 96 | 0 |
| MX120-48FXO | 0 | 48 |
| MX120-72FXO | 0 | 72 |
| MX120-48S/48 | 48 | 48 |
| MX120-60S/12 | 60 | 12 |
| MX120-72S/24 | 72 | 24 |
| MX120-80S/16 | 80 | 16 |

New Rock Technologies, Inc. is an innovative provider of IP-based voice communication equipment for service providers, enterprises, system integrators, independent software vendors and OEM partners worldwide. We have established our research and development, marketing and sales, and manufacturing operations in Shanghai, China. New Rock Technologies offers a full line of VoIP products from voice access gateway, to digital trunking gateway, IP-based PBX, gateway management system, and application software platform.

