OM8000 IP-Telephony System





OM8000

Permitted IP Extension(s)	10,000
Permitted IP trunk(s)	10,000
Concurrent calls	800 (with call recording)
Call processing capacity	37,000 busy-hour call completions (BHCC)
Dimensions (H × W × D)	Individual unit: 44mm × 442mm × 420mm (1U) Dual unit stack: 88mm × 442mm × 420mm (2U)

New Rock OM8000 IP-telephony system is the latest IP PBX providing a converged solution package of telecommunication (including audio calls, video calls, high-speed fax, telephone conferencing, call recording, and mobile extensions). It satisfies the demand for a distributed network of over 10,000 extensions throughout government agencies and business g roups, both of which require at least 1,000 extensions per site.

OM8000 supports access for 10,000 users with 800 concurrent calls, d emonstrating its powerful call processing capacity. This outstanding performance even extends to its stability, reliability, security, expandability, configurability, and more.

OM8000 meets various telephony requirements, including deployment at a single site of large- and medium-size enterprises, as well as a multi-site telephone network of large corporations and government agencies via internet/VPN. This is made possible by supporting direct connection with carriers via SIP trunk (including IMS), or connection with the carriers or other audio private networks via digital trunk① or analog trunk②, as well as connection to analog telephones, fax machines, POS , IP phones, video phones, softphones on PCs/cellphones/PADs.

Features

Multi-functional with powerful interface

- VoIP operations, such as audio, video, fax, conferencing, and recording
- Support for SIP trunking (including IMS), digital trunking① , and analog trunking②
- Various add-on services, including applications for call recording management, telephone conferencing, centralized equipment management, PMS middleware*, and attendant console system*
- Connection with third-party application systems and secondary development based on API *

High performance and high stability

- Distributed architecture that configures an integrated media resource card
- Highly responsive concurrent call processing
- Auto load balancing

Multiple redundancy/backup methods and security protection mechanism

- Dual system hot backup with switching time less than 5 seconds
- 1+1 redundancy for power supply/network port/main control card, N+1 redundancy for media resource card with auto load balancing
- Encrypted signaling, media, and data transmission
- Access whitelist, external user authorization, long-distance call restrictions, and more

Flexible deployment, easy operation, and simple maintenance

- Centralized single-site deployment and multi-site distributed network
- Centralized equipment management to ensure efficiency operation and maintenance
- Graphical configuration interface
- Detailed alert report via telephone/email③/WeChat④

①Externally connected to New Rock SIP-ISDN trunking gateway (1/2/4 30B+D interfaces per unit)
②Externally connected to New Rock analog trunking gateway (2 to 96 FXO ports)
③④ paired with the New Rock Unified Management System
* Available since the firth quarter of 2019

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Specifications

Protocols	
Call control	SIP/UDP and SIP/TCP (RFC3261), IMS (3GPP)
Network	SSH, HTTP, HTTPS, DHCP client, DNS (A/SRV record), STUN
Media Processing	
Codec	G.711a/u, G.729a/b, G.722, G.722.2
DTMF	In-band audio, 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)
Voice-quality enhancement	Jitter buffer, QoS
Voice	
Smart auto attendant/ Receptionist	Business/non-business hours/holiday, call queuing, attendant group, multilingual/multi-level IVR, auto attendant profiles, VIP service, DID
Dialing	Call barring (5 levels), outgoing route selection, speed dial, emergency call, black/white list for outbound calling, hotline (immediate/delay), least cost routing, automatic route selection
Call settings	Call holding, call parking, call waiting, 3-way calling, call forking, do not disturb, call barge, silent monitoring, secretary, call transfer,call forward, sharing extension, hunt group, etc.
DISA	Authorization with calling party number, authorization triggered by feature access code
Call recording	Through Call Recording Management System
SIP trunk	IMS, multiple SIP servers, Skype Connect
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/ SSH service, IP address filtering of SIP
Encryption	Encryption on SIP signaling or/and media streams, importing and exporting encrypted configuration file, password/PIN
IP phone protection	Prohibition on outgoing dialing by IP extensions on public network, user-agent authentication, registration password cracking protection
Login to Web GUI	Prohibition on login from an IP address on public network, login password cracking protection
Security level	Three levels of security settings
Call restrict	Restrict total call duration, single call duration, concurrent calls, call frequency for long distant calls
Intrusion prevention	ACL-based traffic filtering
High Availability	
Dual system hot backup	Switching time is less than 5 seconds
Component redundancy	Main control board/Power supply/Network port: 1+1 redundancy Media source board: N+1 redundancy

Provisioning, Administration and Maintenance	
Device management	New Rock Unified Management System, TR-069 management (TR-069, TR-104, and TR-106), SNMP
Application interface	OMAPI (XML/HTTP)
Log	8-level log management, FTP backup
Data capture	Network packet capture by port mirroring
Configuration file	import/export/backup
Status and alarm	Status/performance monitoring, Detailed alert report via telephone/email/WeChat
Version	Upgrade, rollback
Others	
Multi-site voice	Internal calls between extensions, call forward, call transfer, outbound trunk sharing, three-way calling, attendant on remote site
QoS	DiffServ, TOS, 802.1p/Q VLAN tagging
Internal storage	Voicemail, history logs, IVR audio files(uploaded by users), system audio files management, configuration file backup, version rollback
Supported add-on software	
Call recording management system	Comprehensive call recording search, score rating, labeling, statement generation, and other managerial operation, authorization management, and file encryption
Telephone conferencing system	10 conferences with 128 participants
Attendant console system*	Fast and convenient help desk platform that features queue calls, call transfer, and extension status reporting
Billing system	Call monitoring and billing management
DockPMS middleware*	Connectivity to Fidelio, OPERA, and other hotel PMSs, providing check-in/check-out, wakeup call, and other features
WeWei softphone app	Available for iOS and Android, which enables corporate mobile extensions through the phones of individual employees via WiFi or 4G network

Hardware specifications

Single-unit frame	1 main control card, 1 fan module, 1/2 power supply module, and 4 idle slots
Media resource card	A single card supports 1,250 IP extensions, 125 concurrent calls and is hot swappable. A single-unit hosts a maximum of 4 media resource cards.
Network port	RJ45, 2×10/100/1000 Base-T, auto negotiation
CON port	RJ45
Internal storage	64GB
Dimensions (H × W × D)	Individual unit: 44 mm × 442 mm × 420 mm (1U) Dual unit stack: 88 mm × 442 mm × 420 mm (2U)
Weight(Net)	7.5kg(a fully equipped single unit)
AC power	100 to 240 VAC, 50/60 Hz, 1A
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)

NSFOCUS RoHS

New Rock Technologies, Inc. is a leading provider of Voice over IP products in China, offering wide range of VoIP products including all-in-one IP-PBX, hybrid IP-PBX, media gateway, session boarder controller, and related application software. We work with service providers, system integrators, distributors, resellers, independent software vendors, as well as OEM partners.