



**REX8000**

REX8000 IP-PBX can provide 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 groups, both of which require at least 1,000 extensions per site.

REX8000 supports access for 8,000 users with 800 concurrent calls, demonstrating its powerful call processing capacity. This outstanding performance even extends to its stability, reliability, security, expandability, configurability, and more.

REX8000 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 trunk<sup>①</sup> or analog trunk<sup>②</sup>, as well as connection to analog telephones, fax machines, POS, IP phones, video phones, softphones on PCs/cellphones/PADs.

Permitted IP Extension(s)	8,000
Permitted IP trunk(s)	8,000
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)

## Features

### Multi-functional with powerful interface

- VoIP operations, such as audio, video, fax, conferencing, and recording
- Support for SIP trunking (including IMS), digital trunking<sup>①</sup>, and analog trunking<sup>②</sup>
- 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/email<sup>③</sup>

<sup>①</sup>Externally connected to Redstone digital VoIP gateway (1/2/4 30B+D interfaces per unit)

<sup>②</sup>Externally connected to Redstone analog trunking gateway (2 to 96 FXO ports)

<sup>③</sup>Paired with the Redstone Remote Device Management System

\* Available since the first quarter of 2020

## Specifications

### Protocols

<b>Call control</b>	SIP/UDP and SIP/TCP (RFC3261), IMS (3GPP)
<b>Network</b>	SSH, HTTP, HTTPS, DHCP client, DNS (A/SRV record), STUN

### Media Processing

<b>Codec</b>	G.711a/u, G.729a/b, G.722, G.722.2
<b>DTMF</b>	In-band audio, RFC2833, SIP-INFO
<b>Fax over IP</b>	T.38, G.711 pass-through T.38 compliant Group 3 Fax Relay Maximum fax rate of 33,600 bps (pass-through) Jitter buffer, QoS

### Voice-quality enhancement

### Voice

<b>Smart auto attendant/ Receptionist</b>	Business/non-business hours/holiday, call queuing, attendant group, multilingual/multi-level IVR, auto attendant profiles, VIP service, DID
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<b>Dialing</b>	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
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<b>Call settings</b>	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.
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<b>DISA</b>	Authorization with calling party number, authorization triggered by feature access code
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<b>Call recording</b>	Through Call Recording Management System
<b>SIP trunk</b>	IMS, multiple SIP servers, Skype Connect

### Security

<b>User-defined ports</b>	SIP port, RTP port, HTTP/HTTPS port to access the Web GUI
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<b>Access list</b>	IP addresses allowed to access HTTP/HTTPS/SSH service, IP address filtering of SIP
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<b>Encryption</b>	Encryption on SIP signaling or/and media streams, importing and exporting encrypted configuration file, password/PIN
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<b>IP phone protection</b>	Prohibition on outgoing dialing by IP extensions on public network, user-agent authentication, registration password cracking protection
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<b>Login to Web GUI</b>	Prohibition on login from an IP address on public network, login password cracking protection
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<b>Security level</b>	Three levels of security settings
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<b>Call restrict</b>	Restrict total call duration, single call duration, concurrent calls, call frequency for long distant calls
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<b>Intrusion prevention</b>	ACL-based traffic filtering
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### High Availability

<b>Dual system hot backup</b>	Switching time is less than 5 seconds
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<b>Component redundancy</b>	Main control board/Power supply/Network port: 1+1 redundancy Media source board: N+1 redundancy
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## Provisioning, Administration and Maintenance

<b>Device management</b>	Redstone Remote Device Management System, TR-069 management (TR-069, TR-104, and TR-106), SNMP
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<b>Application interface</b>	API (XML/HTTP)
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<b>Log</b>	8-level log management, FTP backup
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<b>Data capture</b>	Network packet capture by port mirroring
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<b>Configuration file</b>	import/export/backup
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<b>Status and alarm</b>	Status/performance monitoring, Detailed alert report via telephone/email
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<b>Version</b>	Upgrade, rollback
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### Others

<b>Multi-site voice</b>	Internal calls between extensions, call forward, call transfer, outbound trunk sharing, three-way calling, attendant on remote site
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<b>QoS</b>	DiffServ, TOS, 802.1p/Q VLAN tagging
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<b>Internal storage</b>	Voicemail, history logs, IVR audio files(uploaded by users), system audio files management, configuration file backup, version rollback
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## Supported add-on software

<b>Call recording management system</b>	Comprehensive call recording search, score rating, labeling, statement generation, and other managerial operation, authorization management, and file encryption
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<b>Telephone conferencing system</b>	10 conferences with 128 participants
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<b>Attendant console system</b>	Fast and convenient help desk platform that features queue calls, call transfer, and extension status reporting
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<b>Billing system</b>	Call monitoring and billing management
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<b>DockPMS middleware</b>	Connectivity to Fidelio, OPERA, and other hotel PMSs, providing check-in/check-out, wakeup call, and other features
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<b>RLink softphone app</b>	Available for iOS and Android, which enables corporate mobile extensions through the phones of individual employees via WiFi or 4G network
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## 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 1,000 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, 3A maximum
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)



RoHS