



REX1000

REX1000 IP-PBX provides versatile solutions containing voice/video call, voice message broadcast, Fax, call recording, mobile extensions, to improve work efficiency and service quality of a large-scale enterprise.

The REX1000 supports up to 1000 extensions, and the capable of multi-site networking enable the extensions can be expanded to thousands, to meet the requirement of either a single site or multi-site deployment.

High Integration and Expansibility

The REX1000 is designed as a compact unit with 1U height and it is applicable to a 19 inch rack. It integrates SIP soft switch, voice codec, media processing. The REX1000 analog extensions can be expanded by connecting Redstone gateways.

High Reliability

The REX1000 provides high availability features including 1+1 redundancy of Gigabit-Ethernet ports and AC/DC power supplies (optional). In addition, with high availability featuring primary-standby, active-standby, as well as PSTN failover to handle the failure of the SIP proxy servers, power supply, and network, users are provided with carrier-class availability with minimized potential downtime.

Easy Remote Management

Embedded with the Redstone Cloud client, the device located behind enterprise NAT or firewall can be easily accessed for maintenance and troubleshooting purpose or by far-end applications. Real time monitoring, alarm notification, remote packet capture and software upgrading can be performed with the Redstone or third-party Remote Device Management Systems connecting over TR-069 or SNMP protocol.

Multi-Site Networking, Unified Management

The peer-to-peer communication allows the REX1000 to be easily accessed by remote Redstone IP-PBXs, gateways, IP phones, mobile extensions, so all extensions of headquarters and branches call each other for free and all trunks can be shared. The unified management of call recordings and call histories is achieved too.

Max. IP extensions	1000
Max. IP trunks	1000
Max. concurrent calls	200 without recording, 140 with recording
H×W×D (1U)	44×440×300 mm

Features

- Connected to IMS Networks via ONU
- Peer-to-peer communication between Redstone IP-PBX and SIP terminals across NAT without the need for static IP addresses, DDNS or port mapping on the access router
- Headquarters and branch-office communications through SIP-based tie trunks
- Mobile extensions keep you connected anywhere, at any time on any network
- XML/HTTP-based RESTful API for third-party applications
- Remote access via the Redstone Cloud*
- Management with the Redstone or third-party Remote Device Management Systems (TR-069, SNMP)
- Dual-redundant Gigabit-Ethernet ports
- Dual AC/DC power supplies (optional)
- Class I lightning protection

* The Redstone Cloud is based on Amazon.

Specification

Protocols

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

Media Processing

Codec	G.711 (a/μ), G.729a
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)
Voice-quality enhancement	Echo cancellation (G.168-2004), Jitter buffer, Silence suppression (VAD, CNG), PLC

Voice

Smart auto attendant/ Receptionist	Business/non-business hours/holiday, Music on hold, Attendant group, Multilingual/multi-level IVR, Auto attendant profiles, VIP service
---	---

Dialing	Speed dial, Outgoing route selection, Least cost routing, Automatic route selection
----------------	---

Call settings	Call transfer, Call forward, Do not disturb, Barge, Silent monitoring, Simplified DISA etc.
----------------------	---

Call recording	Through Call Recording Management System
-----------------------	--

Voicemail	MWI (polarity reversed, FSK, high voltage)
------------------	--

SIP trunk	IMS, Multiple SIP servers, Skype Connect
------------------	--

Phone status indication	Status subscription (BLF)
--------------------------------	---------------------------

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 / Telnet/SSH service, IP address filtering of SIP
--------------------	---

IP phone protection	Prohibition on outgoing dialing by IP extensions on public network, User-Agent authentication, Registration password cracking protection
----------------------------	--

Web GUI login protection	Prohibition on login from public IP address, Login password cracking protection
---------------------------------	---

Encryption	Encrypted password/PIN
-------------------	------------------------

Security level	Three levels of security settings
-----------------------	-----------------------------------

Provisioning, Administration and Maintenance

Device management	Redstone Remote Device Management System, TR-069 management (TR-069, TR-104, and TR-106), SNMP
--------------------------	--

Remote access over TCP	Redstone Cloud
-------------------------------	----------------

Auto provisioning	Download configuration file via TFTP/FTP/HTTP/HTTPS, Obtaining ACS address via DHCP option 66 or redirection
--------------------------	--

Log	8-level log management, Syslog
------------	--------------------------------

Data capture	Port capture, Packet capture
---------------------	------------------------------

Configuration	Bulk import/export. Resetting to the factory default
----------------------	--

Status and statistic	Call status and history, Device status monitoring and statistics collection
-----------------------------	---

Status monitoring/ alarming	Status/performance monitoring or reporting. Status/performance alarms
------------------------------------	--

Other

Multi-site voice	Support NAT traversal, Uniform dial plan, Call forward, Call transfer. Outbound trunk sharing, Three-way calling, Attendant on remote site
-------------------------	--

QoS	DiffServ, TOS, 802.1p/Q VLAN tagging
------------	--------------------------------------

Media available for storing in internal storage	Local recording, Voicemail, Customer information, User-uploaded IVR file
--	--

Hardware

Network Interface	4×10/100/1000 Mbps RJ45 ports
SD	16GB
CPU	TI AM3352
RAM	256 MB
Flash	32 MB
Net weight	3 kg maximum
Single/Dual AC power supplies	100 to 240 VAC, 50/60 Hz, 1A maximum
Power consumption	18 W
Mounting	Rack
Operating	Temperature: 0 to 50°C, Humidity: 10 to 90% RH (non-condensing)
Storage	Temperature: -40 to 70°C, Humidity: 5 to 90% RH (non-condensing)

