OM1000-A-TE SIP-ISDN Trunking Gateway

OM1000-A-TE

T1/E1 ports: 1/2/4

Max. concurrent calls: 120

BHCC: 40K

Features

- Supports SIP and IMS protocols
- Up to 500 routing and call number transformation rules
- Dual-redundant ethernet ports
- Dual AC/DC power supplies (optional)
- Up to 2000 SIP Trunks, default 500 SIP Trunks
- TLS/SRTP
- Voice VLAN
- Remote access via New Rock Cloud
- Management with New Rock or third-party Equipment Management System (TR-069)
- Interoperability with popular SIP servers, such as Cisco Unified CallManager (CUCM), Broadsoft, Microsoft Skype for Business (Lync), Huawei IMS, and Asterisk/Elastix

The OM1000-A-TE SIP-ISDN trunking gateway provides signaling and media conversion between VoIP and ISDN networks.
A typical application is to support enterprise PBX upgrades to IP when the WAN access is ISDN.

The OM1000-A-TE supports 1/2/4 T1/E1 ports and up to 512 SIP trunks, to meet the requirement of large and medium-sized enterprises for VoIP services.

High Performance

OM1000-A-TE uses a special-purpose high-performance speech processing DSP chip.The DSP daughter card's 6000 MIPS processing capability enables the OM1000-A-TE to provide voice signal processing (G.711, G.729A, and G.723.1), echo cancellation, and T.38 fax relay under full load conditions (120 calls).

High Security

To ensure security, the OM1000-A-TE supports SSH and HTTPS for remote access, and provides functions including signaling and media stream encryption, automatic password strength test, brute-force password cracking prevention, cipher text data storage, access whitelist, and system log backup.

High Reliability

The OM1000-A-TE provides high availability features including 1+1 redundancy of Ethernet ports and AC/DC power supplies (optional), and SIP registration failover.

Remote Management and Maintainability

The New Rock Cloud client inside the OM1000-A-TE allows the OM1000-A-TE located behind an enterprise NAT or firewall to be accessed across Internet securely. Real-time monitoring, alarm notification, remote packet capture and software upgrades can be performed with the New Rock or third-party Equipment Management System with TR-069.

Comprehensive Feature Set

As an intelligent gateway running on an embedded Linux operating system, the OM1000-A-TE supports an advanced feature set such as number transformation for calling/called party, automatic routing, RADIUS billing interface, 2nd-stage dialing tone and ring-back tone, auto dialing, DTMF detection, call-progress analysis, and RTP proxy for NAT/firewall traversal.

OM1000-A-TE SIP-ISDN Trunking Gateway

Specifications

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

Codecs	G.711 (a/μ), G.729a, G.723.1, GSM, iLBC
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 processing	RTP proxy, Firewall traversal, NAT traversal
Auth.&Registration	Up to 512 SIP trunks registration
Others	Number transformation, 500 routing rules, Digit map, RADIUS

QoS

QoS	DiffServ, TOS, 802.1P/Q VLAN tagging

Signaling

PSTN access	E1 ISDN PRI (30 B+D): ETSI EDSS1 T1 ISDN PRI (23 B+D): ANSI NI-2 Switch type: 5ESS Series, DMS Series

Security

Protocol	HTTPS, SSH, TLS, SRTP
User-defined ports	SIP port, RTP port, HTTP/HTTPS port
Encryption	Encryption on SIP signaling or/and media streams. Importing and exporting encrypted configuration file and password/PIN
Intrusion prevention	Access whitelist, Blocking ping response, SIP-allowed IP addresses

High Availability

Redundancy	Dual Ethernet ports, Dual AC/DC power supplies (optional)
PSTN failover	SIP registration failover from primary server to standby server

Provisioning, Administration and Maintenance

Device management	New Rock UMS, TR-069 management (TR-069, TR-104 and TR-106)
Remote access over TCP	New Rock Cloud
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 statistics	Call status and history, Device status monitoring and ISND status monitoring
ISDN maintenance	BERT, Near and loop back, ISDN-D & ISDN-B channel
Upgrade	Firmware upgrade via Web GUI or Auto provisioning

Add-on Software

Finder	Obtains IP addresses of devices in a LAN environment

Product Certification

Telecom Equipment Access to Network License	The certificate is issued by the Ministry of Industry and Information Technology of the People's Republic of China NO:04-A555-203121

Hardware

Ethernet port	RJ-45, 4×10/100/1000 Base-T, self-adaptive
T1/E1 ports	1, 2, or 4 ISDN trunks, supporting up to 120 simultaneous VoIP calls
SD card interface	1
CON interface	1, RJ45
RAM	512 MB
Flash	64 MB
Size (H×W×D)	44×440×300 mm (1U)
Net weight	3kg maximum
Single/Dual AC power supplies	100 - 240 VAC, 50/60 Hz, 1A maximum
Single/Dual DC power supplies	-36 to -72 VDC, 2.5A
Power consumption	18 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)

CE FC RoHS