

# INNOMEDIA

# MTA 6328-2Re

## MULTIMEDIA TERMINAL ADAPTERS

NEXT GENERATION VoIP CPE DEVICES FOR BROADBAND SERVICE PROVIDERS

### KEY BENEFITS

Ideal for deploying to consumer and SOHO broadband customers

Flexible system interoperability and platform support protects your network investment

Easy to install and auto-provision

QoS features provide PSTN-like voice quality service

CLASS features support with call agents or softswitches

NAT & DHCP server functionalities ideal for home networks

Wire speed router throughput: 100 Mbps

Business line features for SOHO/SMB/Enterprise customers

VoIP performance metrics reporting allowing service providers to offer SLA based services



*Standalone MTA 6328-2Re with 2 voice ports*

The standalone MTA 6328-2Re with 2 voice ports is an ideal solution for broadband service providers looking to deploy new revenue-generating telephony services to their customers. Compatible with any standard analog telephone set, the MTA 6328-2Re delivers voice quality and features equivalent or superior to those of PSTN. Its versatile and open system interfaces provide the flexibility to work with many different networks (HFC cable, ADSL, fiber, wireless) and broadband access devices. The MTA 6328-2Re allows users to share their broadband connection throughout their home network by either connecting a PC or a hub into the

MTA downlink port. Its uplink data rate limiting feature ensures voice quality during phone calls by automatically throttling down data throughput and reserving bandwidth for voice whenever a call is in progress. It is highly interoperable and can be used with SIP-based Softswitches or MGCP/NCS Call Agents. For remote provisioning, monitoring and testing, the MTA 6328-2Re supports HTTP, SNMP, TFTP, FTP, and Telnet. It can also be remotely accessed and managed using InnoMedia's Device Management System.

The MTA 6328-2Re supports TCP/IP and allows for VPN connections with PPTP and IPSec pass-through capabilities. This feature is ideal for individuals who telecommute from home or small offices that need to create a single VPN connection to remote networks. NAT capabilities provide simultaneous Internet access for multiple PCs (see Figure 1). The built-in DHCP server automatically assigns IP addresses to devices on the network. The web-based interface allows configuration of the MTA 6328-2Re to handle IP routing and port forwarding for various services, such as FTP and Telnet, and other applications, such as gaming and remote PC access.



# INNOMEDIA MTA 6328-2Re

The MTA 6328 product family is equipped with business line features and is capable of VoIP performance metrics reporting\*, thus, is ideal for broadband service providers to offer Service Level Agreement (SLA) based offerings to residential or enterprise customers.

The business line features include:

1. Key phone system friendly:
  - a. Loop start
  - b. Open disconnect (OSI) signaling
2. Reliable fax with T.38 and G.711 pass-through
3. Low-speed & high-speed modem support for credit card reader transaction
4. RFC 2833 for DTMF and telephony signals transmission with RTP payload
5. Set-based 3-way calling support

The VoIP performance metrics reporting includes both RTCP-XR and end-of-call syslog reporting. The parameters available in the end-of-call syslog messages include:

wan-afactor	R-factor
wan-amos	Conversational MOS score
wan-ploss	WAN packet loss
wan-delay	Mean one-way delay = (End-system-delay A + Round-trip delay + End-system delay B)/2
wan-jitter	Average "nominal" jitter buffer size during the call

*\*VoIP performance metrics reporting requires separate software license (SIP only).*

## MTA INTERFACES

- A. Power
- B. RJ-45 port (uplink to broadband access device)
- C. RJ-45 (downlink to PC)
- D. RJ-11 port (connect to phone)

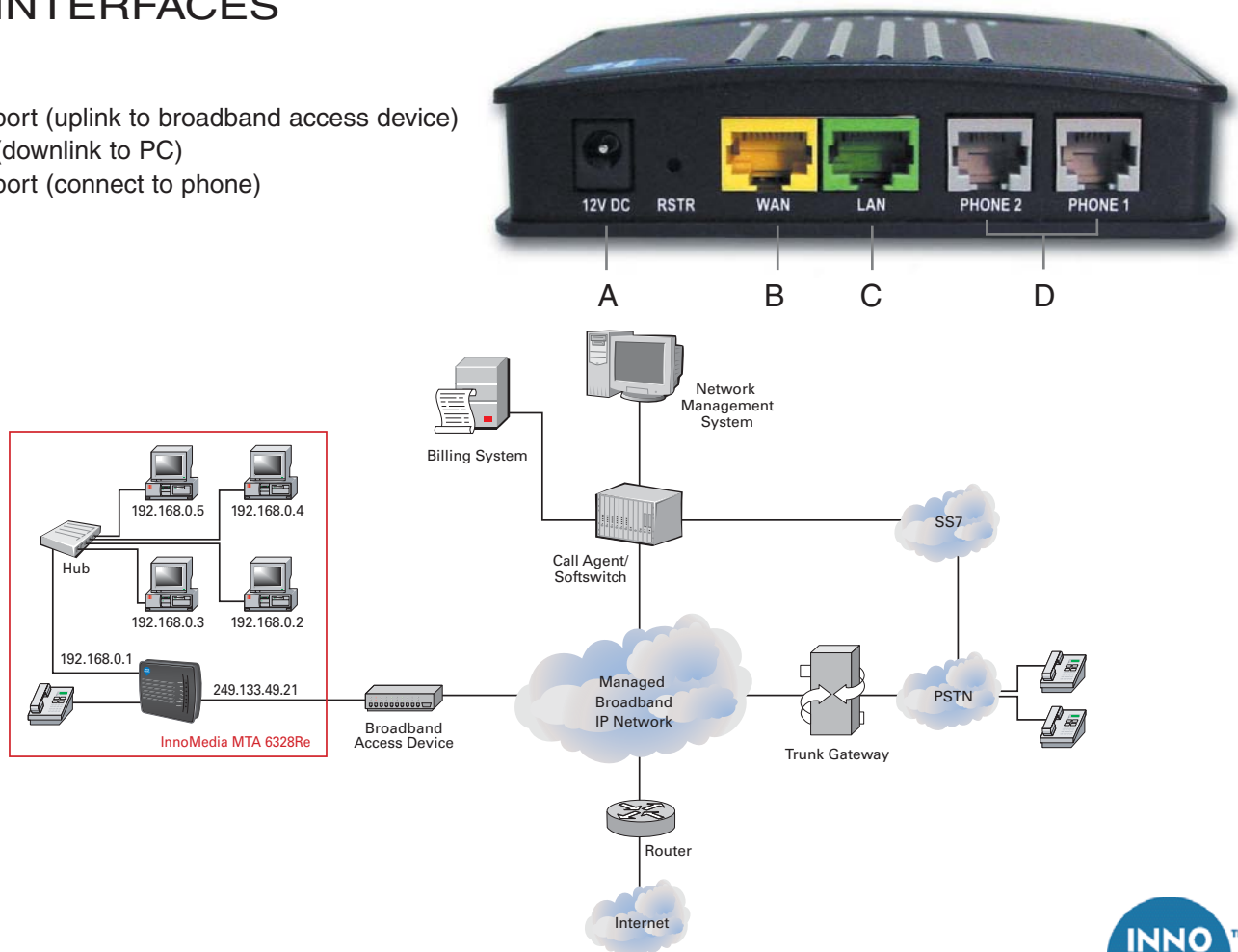


Figure 1- Typical Applications For MTA 6328-2Re

## SPECIFICATIONS

### Product Specification

Category	Specification
Telephone Interface	2 FXS voice port
Network Interface	10/100 Base-T RJ-45 Uplink and Downlink ports
Accessory	Ethernet Cable, AC/DC Power Adapter

### Software Specification

Category	Specification
Protocols	SIP 2.0, MGCP 1.0, NCS 1.0
Speech Codec Capabilities	G.711 and one of the following: G.726 G.723.1; G.729A (Low bit rate codecs) Supports 3-way conferencing with compression
Quality of Service	IEEE 802.1p/q; IP TOS Tagging; Built-in Priority Switch; Data Bandwidth Control; Adaptive jitter buffer
Signal Processing	Echo cancellation Silence suppression T.38 Fax (or fall-back to G.711) Caller ID FSK signal regeneration Line reversal/Polarity reversal 16 Khz metering pulse (MGCP only) OSI (Open Switch Interval-event)
Certification	FCC part 15B; CE; UL
Tones	Ring back tone Reorder tone Off hook warning tone Message waiting tone (MWI)/Stutter tone Busy tone Dial tone Call waiting tone
DTMF Tone	DTMF tone detection and generation/RFC2833
Announcements	Play out any voice stream sent by Call Agent or SIP Proxy controlled announcement server Device IP announcement (SIP only)
OAM&P	Access components implemented: CLI, TFTP, HTTP 1.0, SNMP, Telnet, DHCP or DNS, HTTPS (available soon) Works with any SNMP (v.1, v.2c)-based EMS Offers web-based access as well as HTTP, Secured HTTP, or TFTP-based remote software downloads/upgrades Provisionable set feature codes SIP Loopback (Packet and Media) RTCP-XR Block 7 (SIP only)



## Software Specification

Category	Specification
Other Features	Built-in DHCP server NAT capabilities for simultaneous Internet access for multiple PC's IP routing and port forwarding MAC cloning IP/Domain filtering STUN NAT traversal SIP TLS over TCP Multiple Line Profiles (SIP only) DSCP (Diffserv Codepoint) (SIP only) VLAN Tagging SIP INFO for DTMF/Flash Event SIP Notify for Flash Event SIP PING SIP PRACK RTCP-XR (SIP only)

## Physical Specification

Category	Specification
Power Consumption	Idle: 12V/0.19A (2.28W) / Talking: 12V/0.28A (3.36W)
Power Supply	Output: DC 12V, 1A / Input: AC 120V, 60Hz, 200mA
Dimensions	1.18 in (H) x 4.60 in (W) x 5.12 in (D) / 30 mm (H) x 117 mm (W) x 130 mm (D)
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to 158°F (-20°C to 70°C)
Operating Humidity	10 to 90% RH
Storage Humidity	5 to 95% RH

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