

# Mediatrix® S7 Series

The Mediatrix S7 Series of analog VoIP adaptors (ATAs) offers the ability to smoothly connect all IP and legacy equipment to a hosted or on premise IP-PBX. It is also the ideal solution to connect traditional PBXs and phones to an IP core network without impacting current customer base.

The S7 allows operators and providers to use hybrid IP and analog telephone systems with a wide variety of cost-effective and easy-to-deploy applications including multi-tenant buildings, Hosted UC, and survivability for remote offices.



# **Interconnects any Device to IP**

The Mediatrix S7 Series links any analog connection to an IP network and delivers a rich feature set for a comprehensive VoIP solution.

# **Legacy PBX System Gateway**

With FXS ports, local call switching, and user-defined call properties (including caller/calling ID), Mediatrix S7 Series gateways smoothly integrate into legacy PBXs.

# Highly reliable Fax and Modem Transmissions over IP

With T.38 and clear channel fax and modem passthrough capabilities, the Mediatrix S7 Series ensures seamless transport of voice and data services over IP networks.

# **Advanced Mass Management**

Our advanced provisioning capabilities deliver remarkable benefits to Mediatrix customers. Mediatrix enables centralised CPE management, a definite advantage to monitor the network, ensure service, and reduce operational costs.



# **Applications**

# **Operators**

- ✓ Connect legacy equipment in PSTN replacement/TDM replacement projects
- ✓ Provide analog termination to cloud telephony services, Hosted Unified Communications, and IP-Centrex
- ✓ Facilitate the management for multi-tenant applications
- √ Fully certified with BroadWorks UC platform

# **System Integrators**

- ✓ Integrate Unified Communications with legacy systems
- ✓ Connect Skype for Business and other IP-PBXs to legacy telephony equipment
- ✓ Inter-connect branch offices to headquarters
- ✓ Survivability for branch offices in case of WAN failure
- Reliable and cost-effective solution for hospitality and healthcare sectors
- ✓ Support high compression codecs saving valuable bandwidth

# **Key Features**

#### **Carrier-Grade Voice Quality**

T.38 and clear channel fax over IP
High performance processing of up to 28 voice channels
3 way conference call and conference server support,
collect call blocking, CCNR, and CCBS
Survivability for IP-Phones in Hosted UC/PBX deployments
Battery reversal for pay phones

# **Robust Security**

Encrypted media, signaling, and management Deep packet inspection firewall with DoS protection

#### **Easy Configuration and Management**

Zero-touch configuration Intuitive Web GUI Customisable factory settings

# **Networking**

Dual-stack IPv6 and IPv4
Multiple IP addresses and VLANs
NAT, firewall, and router capabilities
5 ports Gigabit Ethernet

# **Benefits**

- ✓ High quality built and carrier-grade validation standards contribute to the industry's most reliable platform
- ✓ Extensive TR-069 support for an easy management of large-scale deployments with a centralised EMS
- Superior call routing and manipulation capabilities for the implementation of complex deployment scenarios

# **Technical Specifications**

#### **Media Processing**

G.711 (A-law and  $\mu\text{-law})\text{, G.722, G.726, and G.729a/b;}$ 

G.168 echo cancellation

DTMF detection and generation

Carrier tone detection and generation

Silence detection/suppression and comfort noise

Configurable de-jitter buffer and packet length

Packet loss concealment

# **Enhanced Security**

Denial of Service (DoS) protection

SIP over TLS

SRTP with AES cipher - 128 bits

MIKEY key management protocol (RFC 3830 and 4567)

SDES key management protocol (RFC 4568)

TLS-encrypted configuration and management

X.509 certificate management

OCSP (Online Certificate Status Protocol) revocation

status verification

TLS Version 1.2

Secure TLS ciphers like ECDHE with AES-256 and SHA-384

# Management

Zero-touch provisioning

TR-069, TR-104, and TR-111

Web GUI

SSH and TELNET

SMNP v1, v2c, and v3

Scripts/firmware files uploaded via HTTP, HTTPS, FTP,

and TFTP

Dual firmware banks

Multiple levels of management access rights

Customisable CDR

Event notifications via Syslog, SIP, log file, and SNMP

traps

Remote activation of service licenses

# **Monitoring and Troubleshooting**

Alarms and traps

Call quality reporting (eMOS) (RTCP-XR as per RFC 6035)

Call Details Record (CDR)

Media quality statistics

System: CPU and memory usage

PCM capture

IP network capture

Diagnostic traces

#### Quality of Service (QoS)

Bandwidth limitation and traffic shaping TOS/DiffServ

IEEE 802.1p/Q

# **IP Telephony Protocol**

SIP (RFC 3261) over UDP, TCP, and TLS

IMS (3GPP TS 24.229)

RTP (RFC 3550)

SDP (RFC 4566)

Multi-part body support

Redundancy support via DNS SRV

Multiple trunk support

Survivability for IP-Phones

IPv4 and IPv6 dual stack signaling and media

# **Analog Telephony**

Support for call forward, call transfer, conference call,

call waiting, CCNR, and CCBS

Multiple country presets

Customisable tones and ring patterns

Echo cancellation

Message Waiting Indication (MWI), via FSK and voltage

(80v)

On-hook/off-hook caller ID generation (name & number) as per Bell-core DTMF or FSK and Telebras

BINA

Answer and disconnect signaling

#### **Call Routing**

Local switching

Call filtering and blocking

Calling/called number manipulation using regular expressions

Routing Criteria:

- Interface
- Calling/called party number
- Calling/called URI
- Time of day, day of week, and date
- Many others

Mapping and transformation of call properties to/ from SIP headers

Hunt groups

#### **Fax and Modem Support**

Group 3/super G3 fax real-time fax over IP

T.38 fax relay (9.6 k and 14.4 k)

Clear channel (G.711) fax and modem pass-through

#### **Networking**

IPv4 - IPv6

Multiple IP addresses per link or VLAN

Multiple VLANs per link

DHCP client

PPPoE (RFC 2516)

IEEE 802.1q + DSCP QoS tagging (media, signaling,

and mgmt)

IEEE 802.1x wired authentication

LLDP-med (ANSI/TIA-1057)

QoS traffic shaping

Firewall with stateful inspection, rate-limitation, and

automatic black-listing

Static routing

NAPT

**DHCP Server** 

#### **Physical Interfaces**

 $5 \times 10/100/1000$  Base-T Ethernet RJ-45 connectors

2 x TDM sync RJ-45 connectors

4, 8, 12, 16, 20, or 24 x RJ-11 FXS connectors

# **Power Supply**

Internal 100-240 VAC power supply

#### **Dimensions**

Height: 4.4 cm

Width (mounting brackets): 48.5 cm

Depth: 19.5 cm Weight: 3Kg

## **Operating Environment**

Operating temperature: 0°C to 40°C Storage temperature: -20°C to 70°C Humidity: up to 85%, non-condensing

Analog Ports	✓ Up to 24 FXS
Mounting	Rack
Network	5 x 10/100/1000 Base-T
Survivability	$\checkmark$

This datasheet applies to model: M.



Media5 Corporation is a global supplier of multimedia communication solutions, offering a complete set of IP-based products and technologies.

With a focus on innovation and excellence in customer support, we deliver highly adaptive hardware and ready-to-market software components. This allows our customers and partners to take advantage of secure, reliable, and comprehensive communication solutions.

Present in more than one hundred countries, Media5 has its headquarters in Canada and local representatives in North and Latin America, Europe, and the Middle East.

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