

Mediatrix® C7 Series

The Mediatrix C7 Series is a secure and reliable Media Gateway and VoIP Adaptor (ATA) featuring FXS, FXO, and BRI interfaces. The Mediatrix C7 Series offers the most price effective solution for branch offices and SMBs, ensuring a simple and transparent connection to the PSTN and analog terminals such as telephones, modems, and fax machines.

Mediatrix platforms are fully interoperable with the major IP-Phone manufacturers, softswitches, and Cloud Communications services across the globe.



Interconnects any device to SIP

The Mediatrix C7 Series links any analog connection to an IP network and delivers a rich feature set for a comprehensive VoIP solution.

PSTN access and legacy **PBX** system gateway

With FXS, FXO, and BRI ports, local call switching, and user-defined call properties (including caller/calling ID), Mediatrix C7 Series gateways smoothly integrate into legacy PBXs and incumbent PSTN networks.

Highly reliable Fax and Modem Transmissions over IP

With T.38 and clear channel fax and modem pass-through capabilities, the Mediatrix C7 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 SIP termination for cloud telephony services
- ✓ Convert analog signaling to SIP for Hosted Unified Communications and IP-Centrex

System Integrators

- ✓ Integrate Unified Communications with legacy systems
- ✓ Connect Skype for Business with PSTN and legacy telephony equipment
- ✓ Keep existing telephony equipment in SIP migrations
- ✓ Inter-connect branch offices to headquarters
- ✓ Survivability for branch offices in case of WAN failure

Key Features

Carrier-Grade Voice Quality

T.38 and clear channel fax over IP
High performance processing of up to 10 voice channels
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

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 µ-law), 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

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

call waiting, CCNR, and CCBS
Multiple country presets
Customisable tones and ring patterns
Echo cancellation
Message Waiting Indication (MWI), via FSK
Caller ID detection (name & number) as per Bell-core FSK
On-hook/off-hook caller ID generation (name & number) as per Bell-core DTMF or FSK and Telebras
BINA

Support for call forward, call transfer, conference call,

Answer and disconnect signaling

Digital Telephony

Euro ISDN EDSS-1/ETSI BRI/NET3 ISDN speech, audio, and data (Fax Gr 4, UDI 64, and RDI 64) ECMA-143 (QSIG-BC) Advice of Charge AOC-D and AOC-E (ETS 300 182)

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

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
Supported TLS key exchange mechanism:

- RSA
- Diffie-Hellman

Supported TLS ciphers (minimum):

- AES (128 and 256 bits)
- 3DES (168 bits)

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

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 Details Record (CDR)
Media quality statistics
System: CPU and memory usage
PCM capture
IP network capture
Diagnostic tracess

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

Quality of Service (QoS)

Bandwidth limitation and traffic shaping

TOS/DiffServ

IEEE 802.1p/Q

RTCP-XR - special order

Physical Interfaces

2 x 10/100 Base-T Ethernet RJ-45 connectors

Power Supply

External 100-240 VAC power supply

Operating Environment

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

Dimensions

Height: 4.4 cm approx. Width: 28.3 cm approx. Depth: 16.2 cm approx.

Analog Ports	Up to 8 FXS Up to 8 FXO
Digital Ports	Up to 4 BRI
Mounting	Desktop or Wall Rack mounting kit available
Network	2 x 10/100 Base-T Ethernet RJ-45
Survivability	✓



This datasheet applies to model: C.



medias A Trusted Partner

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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