



Mediatrix 4100 Series – 2, 4, 8, 16, or 24 –port VoIP Access Device

The Mediatrix[®] 4100 access devices are high-quality and cost efficient VoIP gateways connecting larger branch offices and multi-tenant buildings to an IP network, while preserving investment in analog telephones and faxes.

The Mediatrix[®] 4100 access devices allow Service Providers to deploy rapidly and economically their solutions in medium-size premises and they are the ideal solution for branch office connectivity to larger private networks.

Key Benefits

Voice Functionalities

- Carrier-grade voice quality
- Fax over IP support, including T.38
- PSTN bypass (emergency calls)
- Up to 24 simultaneous calls

Ease of configuration and management

- Automatic firmware and configuration file download
- SNMP and web management
- TFTP or HTTP auto-provisioning

Security

- Support for SNMPv3
- Encrypted configuration files support
- HTTP Digest authentication
- Secured SIP signalling and media transmission

Network functionalities

- · QoS features support
- DHCP client
- STUN Client



Mediatrix 4100 Overview

The Mediatrix 4100 connects up to 24 analog phones and/or faxes to a broadband modem or I AN.

The Mediatrix 4100 enables cost-effective VoIP deployments in medium-size branch offices and multi-tenant applications.

The Mediatrix 4100 has the additional benefit of supporting high compression codec's simultaneously on each analog voice ports, thus saving valuable bandwidth.

As all other Mediatrix devices, the 4100 provides web interface, giving users a convenient access to the unit for initial set-up. The devices can also autoprovision by fetching their encrypted configuration from a TFTP or HTTP server making installation secure and transparent to the end-users. To further facilitate deployments, factory loaded configurations are possible.

The Mediatrix 4100 offers security features such as TLS, SRTP, certificates management, and HTTPS designed to bring enhanced security for the network management, SIP signalling and media transmission aspects.

In addition, an intelligent PSTN bypass allows Mediatrix 4100 users to make emergency calls and maintain their phone service in the event of a power outage or network failure.



Technical Specifications

Models

- Mediatrix 4102: 4 analog FXS ports
- Mediatrix 4104: 4 analog FXS ports
- Mediatrix 4108: 8 analog FXS ports
- Mediatrix 4116: 16 analog FXS ports
- Mediatrix 4124: 24 analog FXS ports

IP Telephony Protocol

- SIP RFC3261
- MGCP/NCS

Voice Processing

- Vocoders: G.711 (A-law, μ-law), G.723.1, G.726, G.729a/b
- G.168 echo cancellation (64ms)
- DTMF detection and generation
- Carrier tone detection and generation
- Silence detection / suppression and Comfort Noise Generation level software adjustable
- Configurable dejitter buffer
- Configurable tones (dial, ringing, busy)
- · Configurable transmit packet length
- RTP/RTCP RFC 1889, RFC 1890, RFC 2833, RFC 3389

Enhanced Security

- HTTPS, for the exchange of Configuration File.
- SRTP with MIKEY as key selection method.
 - Supported Cypher
 - AES 128 bits
- MIKEY protocol using pre-shared keys (RFC 3830 and 4567) for negotiating SRTP keys.
- Certificate management.
- TLS transport method.
 - Supported Key Exchange Mechanism:
 - RSA
 - Diffie-Hellman
 - Supported Cyphers (minimum):
 - AES (128 and 256 bits)
 - 3DES (168 bits)

Fax and Modem Support

- Group 3/Super G3 Fax real-time FoIP over clear channel (G.711), G.726 or T.38
- T.38 Fax relay (9.6 k, 14.4 k)
- G.711 Fax and Modem Bypass

Management

- Web-based GUI
- TFTP, HTTP configuration up- and download (Auto-provisioning)
- TFTP, HTTP firmware upgrade
- SNMPv1, v2 and v3 agent (MIB II and private MIB)

WAN Connection

• 1 x 10/100 Base T Ethernet RJ-45 connector

Analog Connection

- Mediatrix 4124: 1 x RJ-21X TELCO 25 pairs connector, analog phone/fax (FXS) interface.
- Mediatrix 4116: 16 x RJ-11 connectors, analog phone/fax (FXS) interfaces.
- Mediatrix 4108: 8 x RJ-11 connectors, analog phone/fax (FXS) interfaces.
- Mediatrix 4104: 4 x RJ-11 connectors, analog phone/fax (FXS) interfaces.
- Mediatrix 4102: 2 x RJ-11 connectors

QoS

- TOS/DiffSery
- IEEE 802.1p/Q

Enhanced Telephony Features

- Call Forward / Call Transfer / 3-way Conference Call / Call Waiting / Caller ID on Call Waiting / Call on Hold
- Dynamic De-Jitter Manager
- Voice Activity Detection/ Comfort Noise

Operating Environment

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

Power Supply

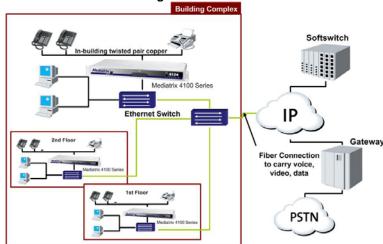
 AC: Standard power cord receptacle (IEC 320-C14) for universal AC input internal SMPS

Unit Dimensions and Weight

- 5.5 cm x 26.0 cm x 17.7 cm (1.8 in. x 18.9 in. x 8.6 in)
- Unit Weight 1781 g (3.9lbs)

Application

Multi-tenant / Multi-dwelling solution



Main Advantages:

- Interoperable with equipment from leading industry vendors
- Major savings in long-distance and PSTN access fees

- Re-use of existing infrastructure such as analog phones and faxes
- Simplified wiring = savings in ADDS/MOVES/CHANGES
- Compliancy to current legacy standards increases compatibility with actual PBX or Key systems.
- Access to essential PSTN Emergency calls capabilities even during power outages