Dialogic 1000 Analog FXO, 4 port Media Gateway (DMG1004LSW)



Product Name: Dialogic 1000 Analog FXO, 4 port Media Gateway (DMG1004LSW) Manufacturer: -

Model Number: 310-877

Dialogic 1000 Analog FXO, 4 port Media Gateway (DMG1004LSW)

The Dialogic® 1000 Media Gateway Series (DMG1000 Gateways) allows for a well-planned, phased migration to an IP network, making the gateways a smart solution for enterprises looking to enhance their legacy PBX equipment with new VoIP access and applications. Connected between a PBX or a digital handset and a LAN or WAN, the DMG1000 Gateways convert proprietary digital PBX messages into a format suitable for transmission over standard IP networks.

Features

- Suitable for small to medium enterprises and easy to install, configure, and maintain
- Compatible with a variety of popular PBX manufacturers including Alcatel, Avaya, Ericsson, Fujitsu, Mitel, NEC, Nortel, and Siemens
- Designed, developed, and tested in Dialogic's state-of-the-art PBX lab and optimized for use in an Enterprise environment
- Support for IP load balancing and IP fault tolerance
- Seamless interoperability with Dialogic® HMP Software
- Supports configuration via serial, telnet, and a web browser including context-sensitive help
- IP security features include TLS, SRTP, and HTTPS

Benefit

• Protects investment in legacy telecommunications equipment and allows a controlled migration to IP technology

• Ideally suited for Enterprise Unified Messaging applications (tested and certified with Microsoft® Exchange Server UM)

• Allows the ability for inbound (TDM-to-IP) calls to round-robin between available media servers and automatically routes calls away from unresponsive media or proxy servers

• Provides the options for customers to build enhanced applications on top of base gateway and PBX functions

• Easy to install, configure, debug, and maintain

• Enables secure communications for SIP messages via TLS, for media stream via SRTP, and for web interface via HTTPS

Applications

• Centralized VoIP and FoIP application servers, including IP-based voice mail and unified messaging

- IVR and announcements
- IP PBX
- VoIP extension to branch offices
- Contact centers

Functional DescriptionThe DMG1000 Gateways each contain eight digital PBX emulation interfaces and a 10/100 BaseT Ethernet connection for connecting to a LAN. An analog loop start

unit designed for voice mail and unified messaging applications is also available to connect to PBXs that do not have an appropriate digital interface. The analog loop start unit supports integration via in-band signaling (DTMF or FSK) or serial protocols (SMDI, MCI, and MD-110). The DMG1000 Gateways provide a simple, cost-effective transition to voice and data convergence for enterprises with PBXs. Connected externally, they offer an IP solution that works with current legacy equipment. They support SIP-based applications as well as T.38 for fax transmissions over IP (FoIP). Gateway unit features include:

• Voice over Internet Protocol (VoIP) – Supports SIP per RFC 3261. Uses Real-time Transport Protocol/Real-Time Control Protocol (RTP/RTCP) for delivery of voice over the LAN or WAN

• IP security — Supports TLS for SIP messages, SRTP for media stream, and HTTPS for web interface

• Enhanced voice processing – Supports a variety of compression algorithms, including G.711 A-law and µ-law, G.723.1, and G.729AB

• T.38 Fax over Internet Protocol (FoIP) – Emulation units transcode fax from T.30 fax protocol, supporting V.17, V.21, V.27, and V.29 modulation schemes, to T.38 for transmission over a packet network

Hot swap – Allows gateway units to be added or removed without affecting other gateway units

• Web server interface – Each gateway unit is delivered with a web server interface, allowing configuration and software upgrades via a web browser

ConfigurationThe DMG1000 Gateways can be used to connect IP telephones to a legacy PBX, integrate network-hosted applications with the PBX, extend the PBX to branch offices, and integrate various voice and call processing capabilities in an enterprise LAN or WAN environment. Using exclusive PBX network interfaces (emulating), these media gateway appliances provide exceptional IP to PBX integration capabilities to protect an investment in legacy telecom equipment.Figures 1 and 2 provide sample configurations.

Figure 1. IP-Enabled PBX in Communication with SIP Devices over a LAN

Figure 2. IP-Enabled PBX in Communication with SIP Devices at a Branch Office over a WANCall RoutingThe DMG1000 Gateways route calls from the switched network to a VoIP destination on the IP network. Conversely, it routes calls from the IP network through a switch port to a destination telephone number on the switched network. The DMG1000 Gateways support the following call routing options:

- User-configurable list of VoIP servers
- IP load balancing
- IP fault tolerance
- TDM-to-TDM

Figure 3. DMG1000 Gateways Front PanelPhysical DescriptionFigure 3 shows the LEDs on the front panel, which reflects the status of the unit, Ethernet, and PBX telephony ports.

- Ready Shows overall unit status
- Link Shows the unit's Ethernet status
- Data Shows the unit's Ethernet RTP activity
- Port Status 1–8 Shows the unit's PBX link status for each TDM port

Figure 4. DMG1000 Gateways Rear Panel

The back panel (Figure 4) contains both interfaces and indicators. Interfaces

Dialogic 1000 Analog FXO, 4 port Media Gateway (DMG1004LSW)

- Serial port for diagnostics or serial protocol support
- 4 or 8 telephony portsEthernet port
- Reset switch

Status Indicators

- 10/100BaseT
- Full/half duplex
- RX/TX traffic
- Ethernet link state
- Ethernet collision

Technical Specification

• PBX Interface Number of ports 4 and 8 port analog units, and 8 port Digital PBX emulation units, Use multiple gateway units for higher port counts

Connectors 8 shielded female RJ-45 jacks

Network Interface 10/100 Base-T Ethernet LAN portConnector, 1 shielded female RJ-45 jack for LANVoIP Protocols

- SIP per RFC 3261
- RTP/RTCP for delivery of voice

FoIP Protocol T.38 FoIP Emulation units transcode fax from T.30 fax protocol, supporting V.17, V.21, V.27, and V.29 modulation schemes, to T.38 for transmission over a packet networkVoice Support

- G.711 µ-Law and A-Law, G.723.1, G.729AB
- · Silence suppression with comfort noise
- G.168 automatic echo cancellation

• Call Progress Analysis (CPA), including Positive Voice Detection, Positive Answering Machine Detection (PAMD), DTMF detection, and fax tone detection

Quality of Service

- Type of Service (ToS)
- IP precedence

Configuration and Management

- SNMP v1 Read-only for alarm reporting
- Web GUI With context-sensitive Help facility
- TelnetBOOTP client and TFTP client Built-in

Call Routing

- User configuration list of VoIP endpoints
- IP load balancing
- IP fault tolerance
- Supports configuration of a backup SIP proxy server

Dialogic 1000 Analog FXO, 4 port Media Gateway (DMG1004LSW)

- TLS for SIP messages
- SRTP for media stream
- HTTPS for web interface

Power Requirements

- Line voltage 90 VAC to 264 VAC
- Frequency 47 Hz to 63 Hz

Physical Dimensions

- Length 10 in. (25.4 cm)
- Width 9.5 in. (24.1 cm)
- Height 2.1 in. (5.3 cm)
- Weight Approximately 2.5 lbs. (1.13 kg)

Environmental Requirements

- Operating temperature 32ºF to 122ºF (0ºC to 40ºC)
- Non-operating temperature –4ºF to 158ºF (–20ºC to 70ºC)

ApprovalsSafety

- Canada CAN/CSA 60950, third edition
- European Union EN 60950
- United States ANSI/UL 60950, third edition

EMC

- European Union EN 55022-1998 Class B
- Canada IC ES-003 Class B
- United States FCC Part 15 Class B

Telecommunications

- European Union EN 55024:1998
- Canada IC CS03, Issue 7
- United States FCC Part 68

Reliability/WarrantyEstimated MTBF Five years

Price: £332.30

Options available for Dialogic 1000 Analog FXO, 4 port Media Gateway (DMG1004LSW) :

Support Required

Not Required, Standard Per Unit Plan 1 Year (+£47.00).