



Z H O N E

MALC Voice Gateway

MALC-VG-T1/E1-8-2S, MALC-VG-T1/E1-32-2S

- ✓ *Supports 1+1 Redundancy*
- ✓ *Supports 8 or 32 TDM Ports for Connections to GR-303/V5.2 Switch*

8 and 32 Port Voice Gateway Cards for the MALC

The MALC is a full-featured Broadband Loop Carrier (BLC) optimized for delivering voice, data, and video services over a pure packet access network. MALC gives carriers the flexibility to cost-effectively deliver triple play services over existing facilities today and to migrate these services pure packet network. This migration is accomplished without disrupting subscriber service or revenue streams, giving carriers the ultimate flexibility for optimizing their networks and serving their subscribers.

The MALC Voice Gateway line cards provide 8 and 32 Port options supporting connections to GR-303 and V5.2 voice switches.

The Voice Gateway card can be installed in the MALC chassis with either the GigE Uplinks or ATM Uplinks providing significant investment protection for future network migration. When in a MALC chassis with the ATM uplinksthe voice gateway supports Broadband Loop Emulation Service (BLES) to either GR-303 or V5.2 signals as well as Emulation Loop Control Protocol (ELCP) to V5.2 signals on the local exchange switch.

When the Voice Gateway card is installed in a MALC with the GigE Uplinks it supports Session Initiation Protocol Private Line Automatic Ringdown (SIP-PLAR) to either GR-303 or V5.2 signals on the local exchange switch.

Technical Specifications

Power

- Power Provided by MALC 300/700 Chassis
- Card Power Consumption 55W

Interfaces

- 8 or 32 T1/E1 TDM Ports
- 1 128 Pin Telco Connector

Standards Support

- ATM Forum UNI 3.0, UNI 3.1 (not including ILMI, SVCs, point-to-multipoint)
- ATM Forum UNI 4.0 for PVC features only (not including ABR, SVCs, SPVCs, Multicast)
- GR-303-CORE

Voice Support

- AAL2 SAR for subscriber lines on POTS Cards
- Supports AAL2 BLES, ELCP
- G.711, G.726 and G.729a Encoding of Voice Calls
- G.711 Fallback for Auto detect fax/modem calls
- 8 Interface Groups (IG)
- 960 Call Capacity for Concurrent off-hook DS0s

Protocol Support

- RIP v1 (RFC 1058)/RIP v2 (RFC 2453)
- DHCP Server (RFC 2131, 2132)
- DHCP Relay
- Bridging 802.1D
- VLAN 802.1Q with 802.1p Priorities
- Multicast IGMP v1/v2
- IEEE 802.17 RPR
- RFC 1483 Routed

Management

- Terminals
 - ZMS (Zhone Management System) via SNMP v2c for GUI and CORBA IDL machine interface
 - Terminal for Command Line Interface (CLI)
 - Built-in GUI-based Management
- Management Interfaces
 - In-band IP
 - Out-band IP over 10 / 100 Base-T Ethernet or V.24 serial for async terminal

Regulatory Compliance

- NEBS level 3 compliant
- RUS listed
- Safety: UL 60950 3rd edition, CSA 950 3rd edition, EN 60950, AS / NZS 3260, TS 001
- Emissions: EN 55022A, CFR47 PART 15A (FCC)
- Immunity: NEBS GR-1089-Core level 3, EN 55024, EN 55082-1, T1.601-1992
- Environmental: NEBS GR-63-Core level 3, GR-487 compliant, ETS 300 019-2-x compliant, ISTA transportation and handling
- Network Certification: FCC Part 68, CTR-12, CTR-13, DOC CS-03, TSO 16, GR-57
- Telcordia OSMINE certification

Operating Requirements

- Ambient operating temperature: -40° C to +65° C
- Relative operating humidity: up to 85% (non-condensing)
- GR-487 compliant
- Designed for outside plant deployment

Ordering Information

MALC-UP-T1/E1-ATM/TDM/IP-16

16 Port TDM/ATM/IP Uplink (includes required cable)



Zhone Technologies, Inc.
 @ Zhone Way
 7001 Oakport Street
 Oakland, CA 94621
 510.777.7000 phone
www.zhone.com

For more information about Zhone and its products, please visit the Zhone Web site at www.zhone.com or e-mail info@zhone.com

Zhone, the Zhone logo, and all Zhone product names are trademarks of Zhone Technologies, Inc. Other brand and product names are trademarks of their respective holders. Specifications, products, and/or product names are all subject to change without notice.
 Copyright 2007 Zhone Technologies, Inc. All rights reserved.