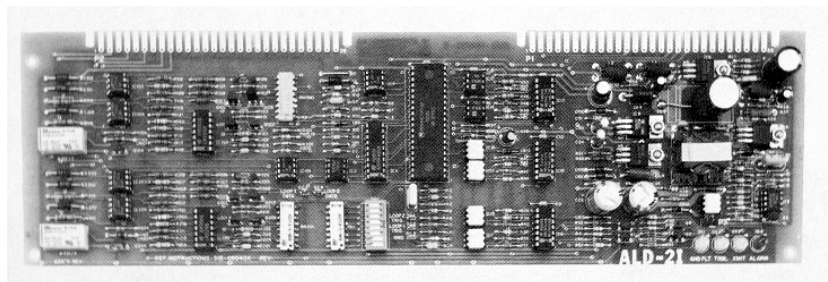# SIEMENS

ALD-2I Analog Loop Driver

ENGINEER AND ARCHITECT SPECIFICATIONS

- Dynamic Supervision
- 2 Intelligent Analog Device Circuits
- Remote Smoke Detector Sensitivity, Voltage Read-out/Printout
- Device Identification
- 32 Character Custom Alphanumeric Message Per Device
- Accepts Remote Conventional Zone Modules (CZM-1)
- Alarm, Trouble, Supervisory, Security and Status Reporting
- Supports Audible Bases
- Short Circuit Isolation with LIM-1
- On Board Microprocessor
- Isolated Power Supply

- Power Limited Per NEC 760
- Programmable Input/Output Module
- 60 Intelligent Devices Per Circuit
- Remote Smoke Detector Sensitivity Adjustment
- Independent Control of Detector Relays (Up to 60 per Circuit)
- Intelligent Contact Monitoring Devices
- Supports T-Tap Wiring
- Style 4 (Class B) or Style 6 (Class A) Wiring
- Degrade Mode
- On-Board Ground Fault Detection
- (UL) Listed, ULC Listed, FM, CSFM, NYMEA, and City of Chicago Approved

Description

The ALD-2I is an MXL Network option module that supplies two intelligent analog circuits utilizing Siemens Fire Safety "I" series, "ID" series, "IL" series or "FP" series type intelligent devices. It occupies two addresses on the Network and, through the use of a unique communications protocol, devices connected to the ALD-2I circuits are dynamically supervised by the MXL Control Panel. Smoke detectors are monitored for sensitivity and notification is given when the sensitivity is outside normal parameters. Each of the ALD-2I circuits supports the use of up to 60 alarm, trouble, security, status and supervisory type devices as well as remote conventional initiating device zone modules (CZM-1), intelligent monitoring devices (TRI) and intelligent control points (ICP-BG). Sensitivity of any smoke detector can be queried and adjusted from the control panel. Sensitivity

as well as other device information can be displayed and printed at the control panel. The ALD-2I supports the use of relay bases and audible bases (independently controllable).

To provide analog loop short circuit isolation, the LIM-1 module can be used to prevent a single short from interrupting loop device communication.

Each ALD-2I circuit can be wired in either a Style 4 (Class B) or Style 6 (Class A) configuration. When using the Style 4 method, T-Tapping is permitted with no loss of supervision.

The ALD-2I has an on board microprocessor that provides it with the ability to function in a degrade mode and

initiate alarm conditions even if the MXL main microprocessor fails.

The ALD-2I plugs into one full option slot in the MOM-2 or MOM-4 card cage.

This equipment is approved for operation over the temperature range of 0°C and 49°C.

Electrical Specifications

1. **Electrical Ratings**

   Module Ratings:

Supervisory:	30 VDC, 175mA max
Alarm:	30 VDC, 175mA max

   Initiating circuits are rated:

Supervisory:	30 VDC peak, 66mA max
Alarm:	30 VDC peak, 66mA max
(60 devices in alarm)	

2. All wiring must be in accordance with Article 760 of NEC and local building codes.

3. Only the devices in the following list may be used. A maximum of 60 devices (excluding CZM-1,CZM-1B6, LIM-1 and ICP) in any combination my be connected to a single loop.The UL identifiers for compatibility are the same as the model names specified below.

4. No end of line device is required.

5. Both circuits are power limited to NFPA 70, per NEC 760. Each detector, or group of detectors, requires a two-wire circuit of 18 AWG minimum thermoplastic fixture wire enclosed in a conduit of 18 AWG limited-energy shielded cable without conduit, if permitted by local building codes.

6. Total circuit resistance must not exceed 100 ohms.
   Maximum Capacitance:
   0.4µF, between loop+ and loop-
   0.8µF, between loop+ and chassis
   0.8µF, between loop- and chassis

7. T-Tapping is not allowed on Class A loops.

Ordering Information

Model Number	Description	Part Number
ALD-2I	Analog Loop Driver for MXL	500-891618

Refer to Installation Instructions P/N 315-091464

Compatibility for ALD-2I

Compatible Devices	Installation Instructions
CZM-1	P/N 315-090725-8
CZM-1B6	P/N 315-095355-2
FP-11/FPT-11*	P/N 315-095921-4
ID-60I/60IH	P/N 315-090287-2
ID-60IA/60IAH	P/N 315-090287-2
ID-60IB/60IBH	P/N 315-093234-4 P/N 315-093235-4
ID-60T-135	P/N 315-090288-2
ILI-1/1H	P/N 315-095387-1
ILI-1A/1AH	P/N 315-095387-1
ILI-1B/1BH	P/N 315-093234-4 P/N 315-093235-4
ILP-1/ILPT-1	P/N 315-092594-5
ILP-1(d)	P/N 315-093234-4 P/N 315-093235-4
ILP-2**	P/N 315-095028-3
ILT-1	P/N 315-093336-1
MSI-10/20	P/N 315-090903-3
MSI-10B/20B	P/N 315-093329-3
TRI-B6/B6R/B6D	P/N 315-093315-3
TRI-B6M	P/N 315-094547-1
TRI-S/D/R	P/N 315-096242-2