

Data communications over telephone lines can pose a special problem to railroads. Power isolation and environmental requirements preclude the use of commercial modems.

Fortunately, the PIM is engineered to meet the rigors associated with railroad applications.



www.micro-aide.com

MICRO-AIDE

PIM POWER ISOLATED MODEM

Features

- ▶ Minimum 4000 Vdc power isolation
- ▶ Operating temperature range of -40°C to +72°C
- ▶ Speeds of 300 to 33.6K Baud
- ▶ New compact size
- ▶ Housed in aluminum case
- ▶ Low power design
- ▶ Standard DTE port supports connections to most wayside equipment
- ▶ Shelf or backboard mountable
- ▶ Comes with MICRO-AIDE's Modem Configuration Application for easy profile preparation



SPECIFICATIONS

Physical

Size
Length: 6.6"
Width: 5.3"
Height: 1.3"
Weight: 10 oz.

Environmental

Storage
Temperature: -50°C to +85°C
Humidity: 0% to 95%, non-condensing

Operating
Temperature: -40°C to +72°C
Humidity: 0% to 95%, non-condensing

Mounting

Shelf or desktop

Construction

Chassis
 Fully enclosed, anodized aluminum, externally accessible connectors and LEDs

Electrical

Single PCB with conformal coating, mounted inside chassis

Power

Voltage
Input: 8 to 36 Vdc

Consumption
 Maximum 60 mA at 12 Vdc

Isolation and Protection

Minimum 4000 Vdc to ground or any input connection, infinite duration

An external, telco-approved suppressor can be used for added protection

Connectors

Power
 Detachable, tension clamp with 4 terminals, 12 to 22 AWG, requires .25" stripped end

Terminals 1 & 2: B, battery positive
Terminals 3 & 4: N, battery negative

DTE

Type: DB-25, female, configured as DCE

Signals: RD, SD, CTS, RTS, DSR, DTR, DCD, RI, Signal Ground

Phone

Single RJ-11

LED Indicators

Green: Power

Red: Qty. 5, Receive Data, Transmit Data, Off Hook, Ring In, Carrier Detect

DTE Interface

Configured as DCE

Auto-Baud detection (fixed Baud rate available)

Line Protection

Internal MOV device used across tip and ring

A telco approved external suppressor should be used for added protection

Regulatory

Designed to meet applicable FCC standards

Modem Standards

Speed: 300 to 33.6K Baud, V.21, V.22, V.29 Fast Connect

Data Compression: V.42bis, V.44

Error Correction: V.42, MNP 2-5

Control Commands

AT command compatibility

Supports most standard Hayes commands

Includes additional AT commands for control of other modem features

Profile

Support for one profile

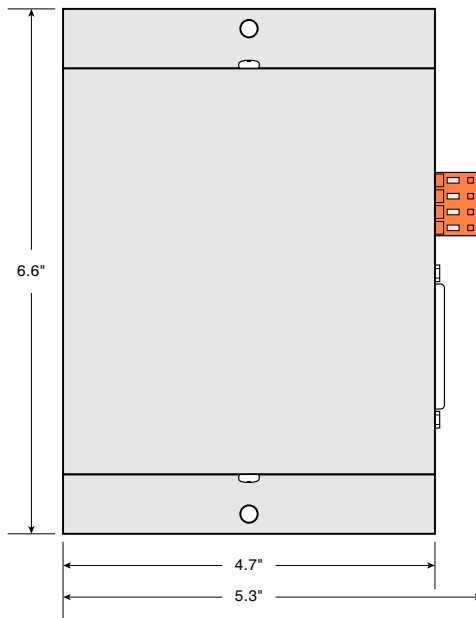
Defined by the sequence of various AT commands

Active profile is volatile until saved to EEPROM

Use MICRO-AIDE's ModemConfig App to create and save a profile

MICRO-AIDE reserves the right to make changes, at its sole discretion, to any specification listed herein.

DIMENSIONAL DRAWING



Mounting Holes (2)
 Dia: .219" Spacing: 6.134" apart

