

# MDM-TEL Industrial Modem



## Reduce design time

The MDM-TEL industrial serial modem has the features to meet your application requirements in a straight-forward manner. You won't need to concoct a way to make it work. The MDM-TEL uses an industrial version of the standard PC modem chip set, so it supports the full set of AT commands and features. The MDM-TEL complies with telephone systems around the world. Whether you have domestic or international customers, the MDM-TEL can go where your equipment goes. Required to use a specific PLC? No problem. The MDM-TEL is compatible with most brands. And with the MDM-TEL, you can avoid repeating the design and qualification process. Our modems have a five-year guaranteed availability.

## Simplify installation

MDM-TEL's PC software includes an advanced Windows-based Configuration Wizard for easy set-up. The MDM-TEL comes ready for either DIN-rail or panel mounting. Requiring only 1.6W of 24 VDC power, the MDM-TEL is perfect for control panels and remote locations without the need for a 110 VAC source.

## Increase reliability

The MDM-TEL has been designed for the industrial environment. It will survive extreme temperatures, as well as dirty and unreliable industrial power. Meeting UL 1604 (Class I Div. 2) and the IEC68-2 standard for vibration resilience, the MDM-TEL will provide years of reliable performance in applications where other modems just shouldn't go.

## Features:

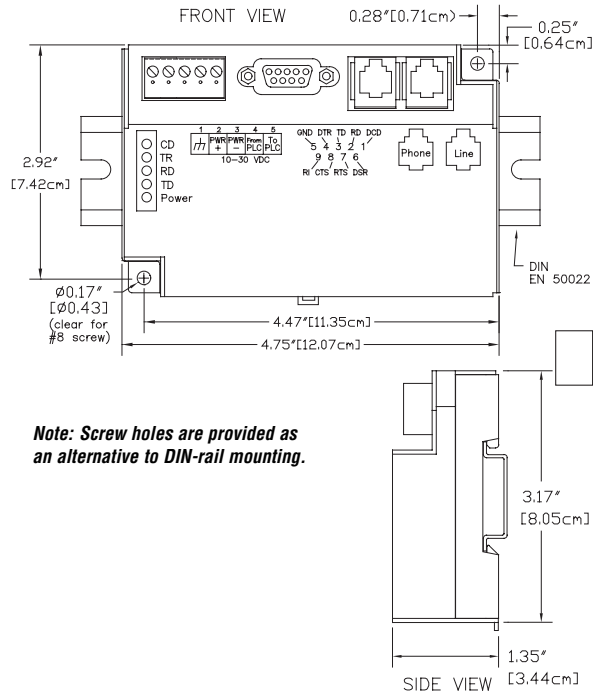
- Contact-initiated dialing allows you to:
  - Report an alarm
  - Report an event
- Works with most PLCs (Null Modem included)
- Auto answer capability
- Global Telecom capability
- DC-powered (no external transformer needed)
- Offers choice of DIN rail or panel mounting
- UL 508 (PLC enclosure), UL 1604 Class I, Div. 2, CSA, and CE-listed
- Rated -30°C to +70°C
- Includes modem set-up software (Windows)
- No DIP switches or jumpers
- Includes RS-232 (DB9) modem configuration cable

MDM-TEL

# MDM-TEL Specifications

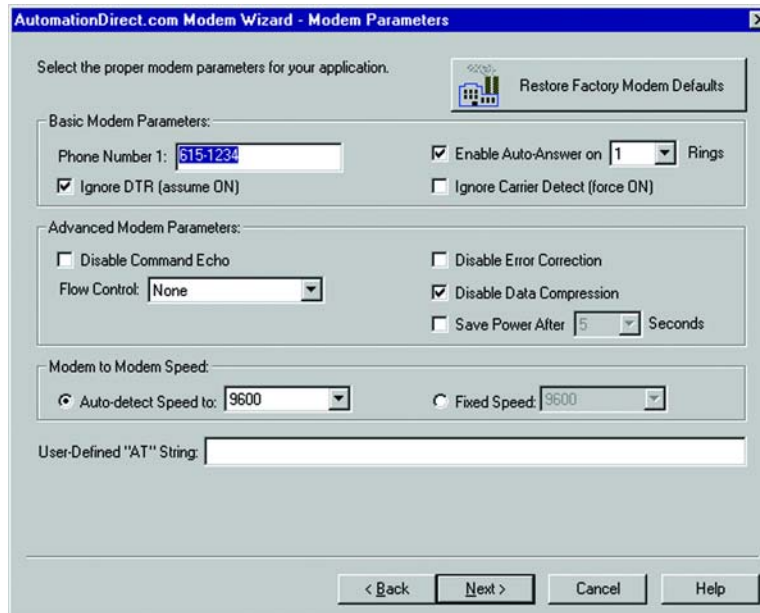
MDM-TEL Performance Specifications	
<b>Telephone Line</b>	
Max. data rate	33.6 kbps (V.34)
Compatibility	V.34, V.32bis, V.32, V.22, V.22A/B, V.23, V.21, Bell 212A and 103
Data compression	V.42 bis MNP5
Error correction	V.42 MNP 2-4
Ringer equivalent	0.3
Line/phone jack	RJ11
<b>RS232 Port</b>	
Max. RS232 rate	115.2 kbps (Kilobaud)
RS232 (DB9 female)	TXD, RXD, CTS, RTS, DCD, DTR, DSR, RI, GND
Command set	All standard AT and S register commands, incl. Class 1 & 2 Fax
<b>Status LEDs</b>	
CD (carrier detect)	Carrier detected on the phone line
TR (terminal ready)	Host connected and ready
RD (receive data)	Data is received from the phone line
TD (transmit data)	Data being sent out the phone line
Power	On when power is present
<b>General Characteristics</b>	
Input power	10-30 VDC
Input current	65 mA @ 24 VDC
Operating temperature	-30°C to 70°C (-40°C to 85°C storage)
Humidity	5% to 95% RH (non-condensing)
Flammability	UL 94V-0 materials
Telecom certification	FCC part 68, Industry Canada CS03-8, CTR21 (98/482/EC); A CA TS 001-1997; ACA TS 002-1997
Electrical safety	UL 508, CSA C22. 2/14; EN61010-1 (IEC1010), IEC 950: 1991, AS/NZS3260-1993
EMI emissions	FCC part15, ICES-003, Class A; EN55022; AS/NZS3548-1995
EMC immunity	EN50082-1 (IEC801-2, 3, 4)
Surge withstand	IEEE-472 (ANSI C37.90)
Vibration	IEC68-2-6
Hazardous locations	UL, 1604, CSA C22.2/213-M1987, Class 1, Div 2, Groups A,B,C,D) Cenelec EN50021 (EEx nA II T4)
Mounting	DIN rail or panel mount
<b>PLC Discrete I/O Interface</b>	
Trigger input	Connects to PLC output. Starts auto-dialing when TRUE.
Voltage range	9 to 30 VDC (6.5 mA at 24 VDC)
Max OFF voltage	5 VDC
Online output	Output is ON as long as a connection exists (carrier detect).
Output type	Sourcing, switches power supply 100 mA max output current

## Mounting dimensions



## Complete documentation

The modem wizard and user manual are provided on the MDM-TEL CD-ROM, or may be downloaded from [www.automationdirect.com](http://www.automationdirect.com). An application note with help for many common situations is included.



Easy set-up with modem wizard software

- PLC Overview
- DL05/06 PLC
- DL105 PLC
- DL205 PLC
- DL305 PLC
- DL405 PLC
- Field I/O
- Software
- C-more HMIs
- Other HMI
- AC Drives
- Motors
- Steppers/Servos
- Motor Controls
- Proximity Sensors
- Photo Sensors
- Limit Switches
- Encoders
- Pushbuttons/Lights
- Process
- Relays/Timers
- Comm.**
- TB's & Wiring
- Power
- Enclosures
- Appendix
- Part Index