

# TD-34

## Advanced Industrial Modem with PSTN fallback function

### Field of application

The TD-34 is a top of the range modem designed for use in the most extreme of industrial environments. This modem is the result of over 25 years of experience in the industrial telecommunication market. The modem is suitable for use at extreme temperature ranges (-40 to +70°C) and can be used to altitudes of 4000 m.

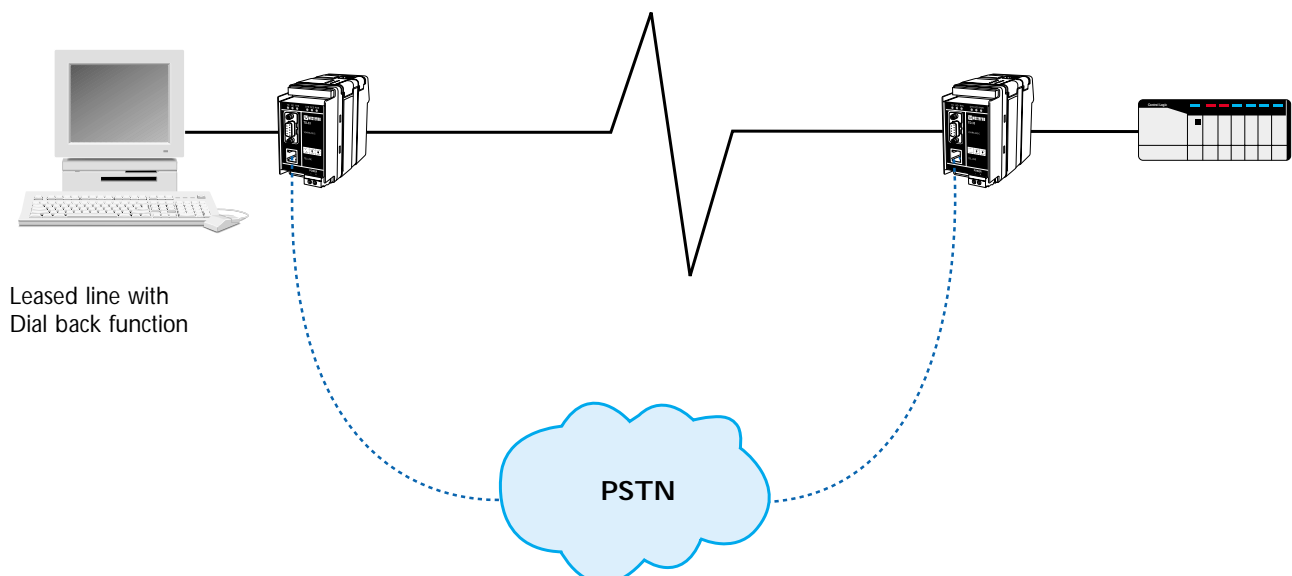
The TD-34 is a V.34 analogue modem meaning that it can support line speeds up to 33.6 kbit/s – the fastest analogue to analogue modulation possible. With a terminal data speed of 115.2 kbit/s the modem can be used for high data rate applications.

A "Fallback" mode is supported when using leased lines. In the event of a line failure a PSTN connection is negotiated and then periodically the leased line is checked until connection can be re-established. The TD-34 has as standard both RS-232 and RS-422/485 ports although only one can be used at any time. There are two variants of the TD-34 for different power supplies, the LV (12–54 V DC, 12–27 V AC) and HV (95–240 V AC 110–240 V DC).



- Up to 33.6 kbit/s (ITU-T V.34)
- Terminal data rates up to 115.2 kbit/s
- RS-232/V.24 on 9-pos. D-sub or screw terminal
- RS-422/485 on screw terminal
- Watchdog function
- High temperature range
- Galvanic isolation and transient protection
- Dial up and leased line
- Supports 11 bit protocols
- HV/LV powered
- 35 mm DIN-rail housing
- Easy installation
- Dip-switch configuration
- Dial back

### Application



## Technical data

Model description	TD-34 LV	TD-34 HV
Frequency	12–27 V AC $\pm 10\%$ 12–54 V DC $\pm 10\%$	95–240 V AC $\pm 10\%$ 110–240 V DC $\pm 10\%$
Fuse, F1	48–62 Hz 1.0 A F, SMD Littelfuse	0–62 Hz 1.0 A S Wickman
Power consumption	3 W	50 mA
PSTN Interface TD-34 LV and TD-34 HV		
Connector	RJ-11 & Screw terminal	
Topology	2-wire on RJ-11 Pin3 & Pin4 bus internally connected to LL1 & LL2 on screw terminal	
Line Modulation	ITU-T V34 (up to 33.6 kbit/s), V32bis, V32, V23 (1200/75), V22bis, V22, V21, Bell212A, Bell103	
Dial up	Tone signals DTMF	
Compression	V42bis & MNP5	
Error Correction	V42 LAPM, MNP 2–4 & MNP-10	
Isolation	1 500 Vrms to rest of electronics	
Leased Line Interface TD-34 LV and TD-34 HV		
Connector	Screw terminal	
Topology	2-wire on screw terminal LL3 & LL4 4-wire on screw terminal LL1, LL2, LL3 & LL4	
Line Modulation	ITU-T V34, V32bis, V32, V23 (1200/75), V22bis, V22, V21, Bell212A, Bell103	
Compression	V42bis & MNP5	
Error Correction	V42 LAPM, MNP 2-4 & MNP-10	
Isolation	1 500 Vrms to rest of electronics	
EIA RS-232-c/V24 Interface TD-34 LV and TD-34 HV		
Connector	9-pos D-sub and screw terminal	
DTE Speed	Up to 115.2 kbit/s	
DTE Format	Up to 11 bits	
EIA RS-422/485-C/ITU-T V.24 Interface TD-34 LV and TD-34 HV		
Connector	2- or 4-wire on 4-pos screw terminal	
DTE Speed	Up to 115.2 kbit/s	
DTE Format	Up to 11 bits	
Alarm Interface TD-34 LV and TD-34 HV		
Connector	3-position screw terminal AL1, AL2 & AL_COM	
Supply Voltage	AL1 10–60 V DC, 1 mA@10 V DC	
Isolation	AL1 1 500 Vrms to rest of electronics	
Output	AL2 Max 1 A, electromechanical relay	
Isolation	AL2 1 500 Vrms to rest of electronics	
Miscellaneous TD-34 LV and TD-34 HV		
Indicators	TD, RD, RTS, DTR, DCD, DSR, PWR, LINE, AL1, AL2	
Operating Temperature	–40 to +70°C	
Altitude	Up to 4 000 m above sea level	
Humidity	0–95% RH, without condensation	
IP-Classification	IP20	
Weight, kg	0.4	
Dimensions, mm	55x100x128 (WxHxD)	
Mounting	On 35 mm DIN-rail	



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