

# **POSITION** Rugged Industrial Telephone Modems

SIXNET Industrial Telephone Modems eliminate the difficulties encountered with installing office-grade modems in industrial settings. These ruggedized modems connect to any PLC, RTU or other industrial equipment and provide the important features you have been looking for.

### **PRODUCT HIGHLIGHTS**

- Rated for -30° to +70°C operation
- Proven in the toughest settings from pipelines In Alberta to remote locations in Sweden
- DIN Rail or flat panel mounting
- DC powered No more bulky AC adapters
- Supports all PLCs, RTUs and other devices
- Compliant with telephone systems world-wide

## SELECT THE MODEL BEST FOR YOU

- VT-MODEM-1 workhorse for general industrial applications. It supports baud rates up 33.6K (V.34)
- VT-MODEM-2 can automatically dial out on a contact closure from any PLC or other device
- VT-MODEM-3 has a RS422/485 port in addition to the RS232 port. It also accepts power up to 52 VDC
- VT-MODEM-4 supports 2-wire leased-line connections up to 33.6K
- VT-MODEM-5 provides advanced features such as call-back security and remote configuration

#### **SELECTION GUIDE**

Functionality	-1	-2	-3	-4	-5
Dial-up and auto-answer	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Auto-dial on PLC ouput	-	$\checkmark$	-	-	-
RS422/RS485 interface	-	-	$\checkmark$	-	-
Extended power input (up to 52 VDC)	-	-	$\checkmark$	-	-
Leased-line* (2-wire only)	-	-	-	$\checkmark$	-
Speeds up to 56K (V.90 & V.92)	-	-	-	-	$\checkmark$
Remote configuration	-	-	-	-	$\checkmark$
Call-back security	-	-	-	-	$\checkmark$

<sup>\*</sup> The VT-MODEM-4 is intended for use in pairs and may not be compatible with other brands of leased-line modems.



VT-MODEM-1, -4 & 5



VT-MODEM-2



VT-MODEM-3



## **VT-Modem Specifications**

#### **TELEPHONE LINE**

- Max. data rate 33.6 kbps for -1, -2, -3 & -4; 56 kbps for -5
- Compatibility V.90, V.92 (-5 only); V.34, V.32 bis, V.32,
  V.22; V.22A/B, V.23, V.21, Bell 212A and 103
- Data compression V.44; V.42 bis, MNP 5
- Error correction V.42 MNP 2-4
- Max. fax rate 14.4 kbps for -1, -2, -3 & -4; 33.6 kbps for -5
- Fax capabilities: V.17,V.29/V.27/V.21, FClass 1,1.0 (-1,-2,-3) V.34,V.17,V.29/V.27/V.21,FClass 1,1.0, 2, 2.0/2.1 (-4 and -5 only)
- Ringer & jacks 0.3 & RJ11 (line and auxiliary)

#### RS232 PORT

- Max. RS232 rate 57.6kbps for -2 & -3; 115.2 kbps for -1 & -4; 230 kbps for -5
- RS232 (DCE) TD, RD, CTS, RTS, CD, DTR, DSR, RI, GND
- Command set standard AT and S register
- Status LEDs CD, DTR, RD, TD, Power

#### PLC DISCRETE I/O INTERVACE (VT-MODEM-2 Only)

- "Trigger" input starts auto-dialing when TRUE
- Voltage range 9 to 30 VDC (6.5 mA at 24 VDC)
- Max OFF voltage 5 VDC
- "On-line" output is ON when connection exists
- Output type sourcing switches supply power
- Output current 100 mA maximum

#### RS422 / RS485 PORT (VT-MODEM-3 Only)

- RS422 mode supports 4 wire full duplex
- RS485 modes 2 or 4 wire party-line operation
- Signal rate up to 115.2 kbps
- RS422/485 up to 0.5 miles

#### **GENERAL CHARACTERISTICS**

- Input voltage 10-30 VDC for -1, -2, -4 & 5; 10-52 VDC for -3
- Input current @ 24 VDC (typical)
  - □ 50 mA (Sleep mode 30 mA): -1,-2,-3 (Rev.3)
  - □ 75 mA (Sleep mode 50 mA): -4, -5

## **ENVIRONMENTAL**

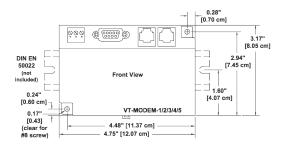
- Operating Temp. -30° to 70°C (Storage: -40° to 85°C)
- Humidity 5% to 95% RH (non-condensing)
- Flammability UL 94V-0 materials
- DIN rail or panel mount
- Vibration IEC68-2-6

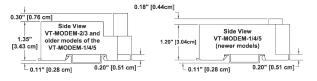
#### **STANDARDS**

- Telecom Ratings: FCC part 68, Industry Canada CS03-8, CTR21 (98/482/EC); ACA TS 001; ACA TS 002
- Electrical Safety: UL 508, CSA C22.2/14; EN60950; AS/ NZS3260
- EMI emissions: FCC part15, ICES-003, Class A; AS/ NZS3548: EN61000-6-4.
- EMC immunity: EN61000-6-2,
- Hazardous locations (Zone 2): UL1604, CSA C22.2/213 (Class I, Div 2); EN60079-15 (Zone2, Cat. 3), (ATEX)

All specifications are subject to change. Consult factory for latest info.

#### MECHANICAL DRAWING







## ORDERING GUIDE

VT-MODEM-1WW General purpose; dial-up 33.6K (V.34)

VT-MODEM-2WW PLC self-dialing and auto-answer

33.6K

VT-MODEM-3WW RS422 / RS485 port and 10-52 VDC

power

VT-MODEM-4WW Leased-lined (2-wire only)

VT-MODEM-5WW Advanced 56K (V.92 and V.90)

\*Note: All modems include a RS232 modem cable (DB9) and complete Windows software.

