

Industrial Grade Bell 202T/V23



Overview

The Data Connect low speed IG-202T and IG-V23 modems are designed and manufactured for rugged industrial communication networks. Both modems deliver cost effective and reliable 1200bps asynchronous solutions for point to point and multipoint connectivity.

The IG-202T and IG-V23 modems are ideal for industrial communication applications including SCADA systems, RTUs, traffic monitor and control, and industrial and automation networks. The IG-202T and IG-V23 supports RTUs with a user selectable.

The IG-202T and IG-V23 modem is designed to operate over 4-wire full duplex or 2-wire half duplex over unconditioned leased lines or private

metallic circuits. For optimum performance, the modem employs FSK modulations to be compatible with Bell 202T and ITU-V23 standards, which can communicate over a variety of transmission lines.

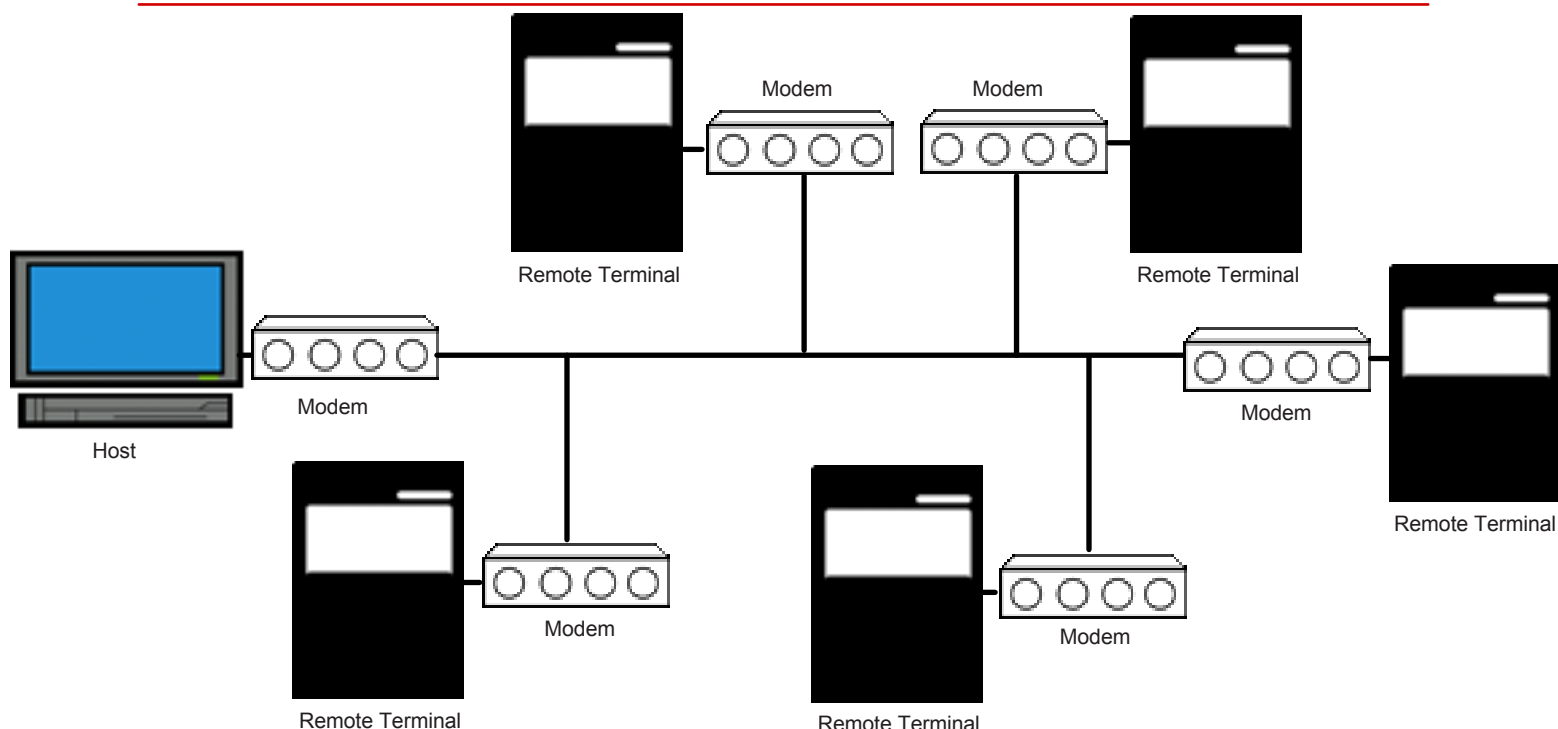
The IG-202T and IG-V23 modem can operate over a wide range of AC or DC power supply voltages and temperatures. With proven reliability and ease of installation the IG-202T and IG-V23 is ideal for point-to-point and point-to-multipoint polling networks, where reliability and low-network latency are critical for system performance.

Features

- Data Rate: 0 - 1200 bps
- Bell 202T and ITU-V.23 compatible operation for 1200bps over Telco lines
- 4 wire full duplex or 2 wire half duplex over unconditioned or conditioned line for point-to-point or point-to-multipoint
- Selectable EIA RS-232/V.24 and RS-485 DTE support
- Built-in loopback diagnostics for local and remote testing

- Configuration and options provided by DIP switches and jumpers, no AT command set is required
- Heavy-duty surge protection provided at power supply and leased line
- Supports wide range of AC and DC power supply options
- Isolated DC to DC converter for protecting critical DC or battery power system
- Wide range of operating temperatures from -40°C to 85°C

Diagrams



Data Rate Support:

Data Speed
 0-1200 bps in Bell 202T mode
 0-1200 bps inITU-V23 mode

Data Format:
 Asynchronous, transparent character format
 10 or 11-bit character with 1 or 2 stop bits

Modulation:
 Frequency Shift Key (FSK)
 Bell 202T mode: Mark 1200 Hz
 Space 2200 Hz
 Soft carrier 900 Hz
 Bell 202T mode: Mark 1300 Hz
 Space 2100 Hz

Transmission Line Interface:
 Leased Line
 TELCO voice band 2- or 4-wire leased lines
 Private or metallic circuits 2- or 4- wire, 19-26 AWG
 Connector: 4 pin RJ-11C modular Jack
 Transmitter output level: 0 to -12 dBm, selectable

DTE/RTU Interface:
 The modem provides serial ports to support both the RS-232 and RS-485 interface standards

RS-232 Interface:
 Connector: DB9-F
 Signals: RTS, CTS, CD, TD, RD, DSR, SG

RS-485 Interface:
 Connector: RJ-11C
 Signals: 4-wire full-duplex:
 TX+, TX-, RX+, RX-

Front Panel Indicators & Controls:

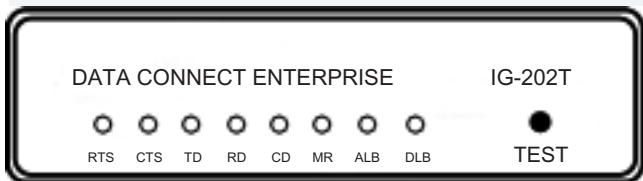
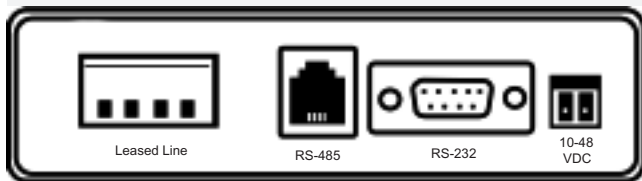
RTS, CTS, TD, CD, RD, MR, ALB, DLB
 TEST Switch:
 Push Button for Analog Loopback, Digital Loopback

Power Supply Specifications:
 Three models support various power options:
 Standalone: 90-264 VAC
 Standalone: 10-48 VDC
 Standalone: 85-265 VAC

Power Consumption:
 Idle mode: 2 watts
 Normal mode: 5 watts, typical

Mechanical Specifications:
 Enclosure dimensions:
 4.1"(w) x 4.9"(l) x 1.4"(h)
 104mm(w) x 125mm(l) x 36mm(h)
 Weight: 0.5lbs, without AC power module

Environment Specifications:
 Temperature:
 Operation: -40°C to +85°C
 Storage: -40°C to +85°C
 Humidity:
 Up to 95% non-condensing



Ordering Information

DCE/IG202T	Standalone with AC power supply 100-240 VAC or 10-48 VDC
DCE/IG202T-HV	Standalone with AC power supply 85-265 VAC or 115-400 VDC
DCE/IG202T-DC	Standalone DC power only 10-48 VDC
DCE/IG202T-DIN	DIN rail kit
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