Industrial Grade
Bell 202T/V23 Modem

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 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 Bell202T 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.

Key Features

Data Rate: 0 - 1200 bps

Bell 202T and ITU-V.23 compatible operation for 1200 bps over Telco lines

4 wire full duplex or 2 wire half duplex over unconditioned or conditioned line for point-to- point or

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

Supports wide range of AC & DC power supply options

Isolated DC to DC converter for protecting critical DC or battery power system

Wide range of operating temperatures From -40° to 85°C

General Specifications

Data Rate Support
Data Speed
  0-1200 bps in Bell 202T mode
  0-1200 bps in ITU-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 2200Hz
                Soft Carrier 900Hz
ITU-V.23 Mode: Mark 1300Hz
                Space 21ooHz

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

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° to +85°C
    Storage: -40° to +85°C
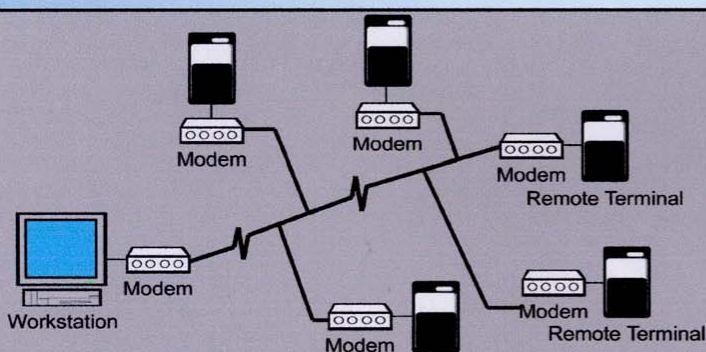 Humidity:
    Up to 95% non-condensing

Model Numbers and Optional Features
  IG202T: Standalone with AC power supply
90-264 VAC or 115-400 VDC
  IG202T-DC: Standalone, DC power only
DC 10-48 VDC
  IGV23: Standalone with AC power supply
90-264 VAC or 115-400VDC
  IGV23-DC: Standalone, DC power only
DC 10-48 VDC

Multi-point Polling Network with the IG-202T Modems