IG202T Industrial Grade Bell 202 Modem

IG202T Industrial Grade Modem is the most dependable and easy to install Bell 202 compatible leased line modem available today

The Data Connect low speed IG202T Industrial Grade Bell 202 modem is designed and manufactured for rugged industrial communication networks. The IG202T delivers cost effective and reliable 1200bps asynchronous solutions for point to point and multipoint connectivity.

The IG202T Industrial Grade Bell 202 modem is ideal for industrial communication applications including SCADA systems, RTUs, traffic monitor and control, and industrial and automation networks. The IG202T supports RTUs with switch selectable settings and no AT command set required. The IG202T 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 202 standards, which can communicate over a variety of transmission lines.

The IG202T Industrial Grade Bell 202 modem can operate over a wide range of AC or DC power supply voltages and temperatures. With proven reliability and ease of installation the IG202T is ideal for point-to-point and point-to-multipoint polling networks, where reliability and low-network latency are critical for system performance. With its Auto-RTS mode, the modem can support DTE/RTUs with 3-wire serial interface (TD, RD, SG) in point-to-point and multi-point polling applications.

The IG202T industrial grade Bell 202 modem has selectable EIA RS-232/V.24 and RS-485 DTE support. It also features built-in diagnostics for local and remote testing. The configuration and options on the IG202T is provided by DIP switches and jumpers, eliminating the need for an AT command set. The IG202T has heavy-duty surge protection at the power supply and leased line inputs. IG202T also uses an isolated DC to DC power converter for protecting critical DC or battery power systems.

Specifications

Data Rate Support:
Data Speed
  0-1200 bps in Bell 202T mode
Data Format
  Asynchronous, transparent character format
  10 or 11-bit character with 1 or 2 stop bits

Modulation:
Frequency Shift Key (FSK)
Bell 202 Mode: Mark 1200 Hz
         Space 2200 Hz
         Soft Carrier 900 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 either the RS-232 or 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
AC and DC Power Support:
Standalone: 10-48 VDC: 85-400 VDC, 100-240 VAC
Rack Mount module: Plug-in RM16M modem rack

Power + Current Consumption:
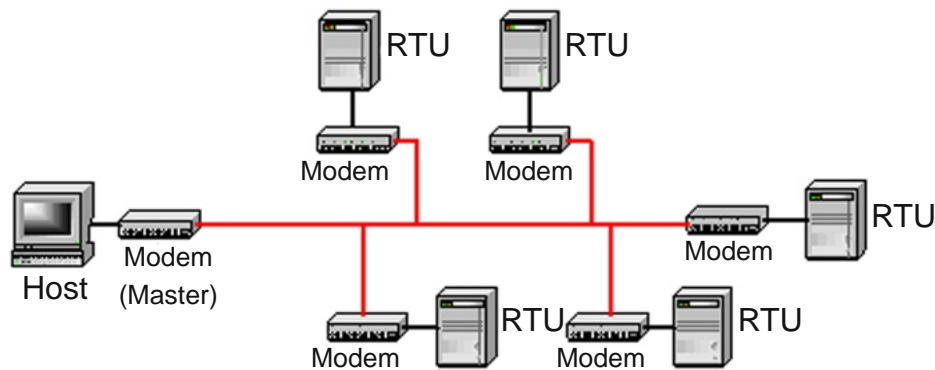75 mA @ 12 VDC
18 mA @ 48VDC

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

Application Diagram

Multi-point Polling Network with the IG202T

Ordering Information

Model No.	Description
IG202T	Standalone AC voltage (100-240 VAC)
IG202T-DC	Standalone DC voltage (10-48 VDC)
IG202T-HV	Standalone High DC voltage (100-240 VAC, 85-400 VDC)
IG202T-RM	RM16M Rack-mount module
IG202T-WMB	Wall-mount/panel-mount kit
IG202T-DIN	DIN-mount kit

Contact Information

DATA CONNECT ENTERPRISE