

# IGV23 Industrial Grade ITU-V23 Modem

**IGV23 Industrial Grade Modem is the most dependable and easy to install ITU-V23 compatible leased line modem available today**

The Data Connect low speed IGV23 Industrial Grade ITU-V23 modem is designed and manufactured for rugged industrial communication networks. The IGV23 delivers cost effective and reliable 1200bps asynchronous solutions for point to point and multipoint connectivity.

The IGV23 Industrial Grade ITU-V23 modem is ideal for industrial communication applications including SCADA systems, RTUs, traffic monitor and control, and industrial and automation networks. The IGV23 supports RTUs with switch selectable settings and no AT command set required. The IGV23 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 ITU-V23 standards, which can communicate over a variety of transmission lines.

The IGV23 Industrial Grade ITU-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 IGV23 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 IGV23 industrial grade ITU-V23 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 IGV23 is provided by DIP switches and jumpers, eliminating the need for an AT command set. The IGV23 has heavy-duty surge protection at the power supply and leased line inputs. IGV23 also uses an isolated DC to DC power converter for protecting critical DC or battery power systems.



# Specifications

## Data Rate Support:

Data Speed

0-1300 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)

ITU-V23 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 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:

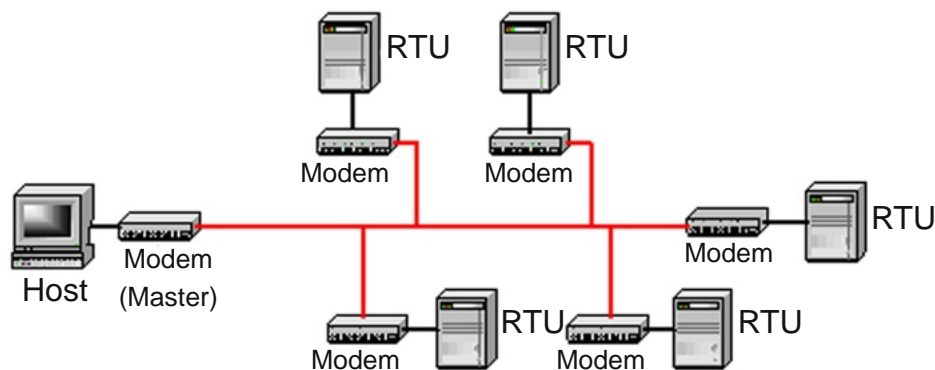
Operation: -40°C to +85°C

Storage: -40°C to +85°C

Humidity:

Up to 95% non-condensing

# Application Diagram



Multi-point Polling Network with the IGV23

# Ordering Information

## Model No.

IGV23

IGV23-DC

IGV23-HV

IGV23-RM

IGV23-WMB

IGV23-DIN

## Description

Standalone AC voltage (100-240 VAC)

Standalone DC voltage (10-48 VDC)

Standalone High DC voltage (100-240 VAC, 85-400 VDC)

RM16M Rack-mount module

Wall-mount/panel-mount kit

DIN-mount kit

# Contact Information

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