

DCE/IG144 SERIES

Ruggedized Modems

The Data Connect DCE/IG144 high-speed V.32bis dial-line modems are designed and manufactured for rugged industrial applications over the Public Switched Telephone Network (PSTN). The DCE/IG144 utilizes the industries latest V.32bis modem technology to deliver outstanding features, performance, and reliability in one cost-effective solution.

The DCE/IG144 modem are ideally suited for industrial communication applications including SCADA systems, RTs, traffic monitor and control, and industrial automation networks. The DCE/IG144 supports RTUs equipped with an EIA RS-232 or RS-485 serial port. Data communications speeds up to 14.4 kbps in reception and up to 9.6 kbps in transmission are supported.

The modems incorporate the latest data-compression and error-correction standards for improved data transmission and reception over marginal and poor-quality telephone lines. Multiple levels of security with password verification and security call back keep your valuable data secure from intruders.

The DCE/IG144 modems are powered by a wide range of AC and DC power supply voltages. Its low power consumption and low stand-by current technology design makes the DCE/IG144 ideal for a battery-powered system as well as regular AC powered operations.



KEY FEATURES

Worldwide Operation Support:

- ITU-TV.32bis/V.32
- V.22bis/V.22/V.23/V.23V.21
- Bell 212A/Bell 103
- V29 FastPOS
- V.22bis fast connect

Data Compression:

- V.44/V.42bis/MNP 2

Error Correction:

- V.42/MNP 2/MNP 4

DTE/ Host Interface

EIA RS-232 and RS-485

Embedded AT command set

Sixty-three embedded and upgradeable country profiles for worldwide homologation

NVRAM for configuration and country profile storage

Built-in remote diagnostics and configuration management

Heavy-duty surge protection provided at power supply and phone line interface

Supports wide range of AC & DC power supply options

Supports DC power supplied from DTE or DB-9 connector

Wide range of operating temperatures

Optional mounting kits for DIN Rail mounting or wall mount

General Specifications

Data Rate Support

Data modem:

ITU-T V32bis: Up to 14.4kbps receive & 9.6kbps transmit
V.32bis: Up to 14400 bps
V.32: Up to 9600 bps
V.22bis: Up to 2400 bps
V.21: 0-300 bps
Bell 212A: 1200 bps
Bell 103: 0-300 bps

Fax modem:

Send and receive fax up to 14.4 kbps
V17, V29, V27ter, and V21 channel 2
EIA/TIA 578 Class 1, T.31 Class 1.0, and Class 2

Data Format: Asynchronous, 7, 8 or 9 data bits, parity,
10- or 11-bit character with 1 or 2 stop bits

Modulation

Fully compatible with ITU-T V.32bis/V.22bis/V.21
Bell 212A and Bell 103 compatible modes.

Transmission Line Interface

2-wire full-duplex over PSTN
Connector: RJ-11C

DTE/RTU Interface

The modem provides serial ports to support RS-232 or RS-485
(selectable) interface standards:

RS-232 Interface

Connector: DB9-F
Signals: RTS, CTS, CD, TD, RD, DTR, DSR, RI

RS-485 Interface

Connector: RJ-11C
Signals: 4-wire full-duplex or 2-wire half-duplex
TX+, TX-, RX+, RX-

Front Panel Indicators

LED. Indicators:
DTR, TXD, RXD, DCD, DSR, RI

Power Supply Specifications

Three models support various power options:

Stand-alone: 90 – 264 VAC
Stand-alone: 100 – 400VDC
Stand-alone: 10 – 48 VDC

Power Consumption:

Idle mode: 65 mA@12V, 0.78 watts
Normal mode: 75 mA@12V, 0.9 watts, typical

Mechanical Specifications

Enclosure dimensions:
4.1”(W) x 5.0”(L) x 1.3”(H)
104mm(W) x 127mm(L) x 33mm(H)
Weight: 0.5 pound, without AC power module

Environment Specifications

Temperature:
Operation: -40° to + 85° C
Storage: -40° to + 85° C

Humidity:
Up to 95 % non-condensing

Dry Contact Detection (optional)

Two optical isolated dry contact detections are provided
for external devices (consult factory for additional
information).

ORDERING INFORMATION

DCE/IG144

Stand-alone with AC power module,
90-264 VAC

DCE/IG144DC

Stand-alone, DC power, 10-48 VDC

DCE/IG144-HV

Stand-alone with AC power module,
90-264 VAC or 100-400 VDC

DCE/IG202T-DIN

DCE EN2 Din Rail Kit