

# DCE/IG56 SERIES

## Ruggedized Modems

The Data Connect DCE/IG56 high-speed V.92 dial-line modems are designed and manufactured for rugged industrial applications over the Public Switched Telephone Network (PSTN). The DCE/IG56 utilizes the industries latest V.92 modem technology to deliver outstanding features, performance, and reliability in one cost-effective solution.

The DCE/IG56 modem are ideally suited for industrial communication applications including SCADA systems, RTs, traffic monitor and control, and industrial automation networks. The DCE/IG56 supports RTUs equipped with an EIA RS-232 or RS-485 serial port. Data communications speeds up to 56 kbps in reception and up to 48 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/IG56 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/IG56 ideal for a battery-powered system as well as regular AC powered operations.



### KEY FEATURES

#### Worldwide Operation Support:

- ITU-TV.92/V.34/V.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

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## General Specifications

### Data Rate Support

#### Data modem:

ITU-T V.92: Up to 56kbps receive & 48kbps transmit  
V.34: Up to 33600 bps  
V.32bis/V.32: Up to 14400 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.92/V.34/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/IG56

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

#### DCE/IG56DC

Stand-alone, DC power, 10-48 VDC

#### DCE/IG56-HV

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

#### DCE/IG202T-DIN

DCE EN2 Din Rail Kit