

Industrial Grade V.92/V.34/V.32bis Dial-line Modems

The Synxcom SM9256D and SM9234D high-speed dial-line modems are designed and manufactured for rugged industrial applications over the Public Switched Telephone Network (PSTN). The SM9256D and SM9234D utilize industry's latest V.92 and V.34 modem technologies to deliver outstanding features, performance, and reliability in one cost-effective solution.

The SM9256D/9234D modem are ideally suited for industrial communication applications including SCADA systems, RTUs, traffic monitor and control, and industrial automation networks. The SM9234D supports RTUs equipped with an EIA RS-232 or RS-485 serial port. Data communication 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 SM9256D/9234D 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 SM9234D ideal for 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.23/V.21
- Bell 212A/Bell 103
- V29 FastPOS
- V.22bis fast connect

Data Compression:

- V.44/V.42bis / MNP 5

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 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

Security Features (optional)

Optional security features with password log in and security
call-back (consult factory for additional information)

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).

Model Numbers and Optional Features

SM9256D: V92/56K/V34/V32bis/V32/V22bis

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

SM9256D-DC: V92/56K/V34/V32bis/V32/V22bis

Stand-alone, DC power, 10-48 VDC

SM9234D: V34/V32bis/V32/V22bis

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

SM9234D-DC: V34/V32bis/V32/V22bis

Stand-alone, DC power, 10-48 VDC

SM9232D: V32bis/V32/V22bis

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

SM9232D-DC: V32bis/V32/V22bis

Stand-alone, DC power, 10-48 VDC