

Fast-Poll Industrial Grade Modem for High Speed Multi-point Communications

The Synxcom Fast Poll industrial modem is designed and manufactured from the ground up for rugged communication networks. Boasting the latest innovative digital signal processing (DSP)-based communication device, the SM19202FP delivers a cost-effective 19200 bps asynchronous solution for point-to-point and multipoint polling network with the industry's fastest train time.

The SM19202FP Fast-Poll modem is ideal for multi-point communication applications including SCADA systems, RTUs, traffic monitor and control, and industrial automation networks. The SM19202FP supports RTUs with an EIA RS-232 or RS-485 serial port at speeds of 19200, 9600, 4800, 2400, and 1200 bps.

The SM19202FP Fast Poll modem is designed to operate over 4-wire or 2-wire unconditioned leased lines or private metallic circuits. For optimum performance, the modem employs QAM and FSK modulations to communicate over a variety of transmission lines.

The SM19202FP Fast Poll modem is designed to operate with a wide range of AC or DC power supply voltages and temperatures. With proven reliability and ease of installation, the SM19202FP is ideal for point-to-point and point-to-multipoint polling networks, where high speed and low-network latency are critical for system performance.



KEY FEATURES

Multiple data rate support: 19200, 9600, 4800, 2400, or 0-1800 bps

QAM modulation for 19200, 9600, 4800, or 2400 bps over Telco voice-band lines

FSK modulation for Bell 202T and ITU-V.23 modes

Fast-train high-speed data pump design for point-to-point or multipoint networks with shortest RTS/CTS delay of 17.5 ms.

EIA RS-232/V.24 and RS-485 DTE support

Cable equalizer extends operating distance over unloaded cables

Built-in local and remote diagnostics and trouble shooting

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

Supports wide range of AC & DC power supply options

Supports DC power supplied from DTE or DB-9 connector

Wide range operating temperatures from -40 to +85°C

Optional mounting options for DIN rail and wall-mounting.

General Specifications

Data Rate Support

Data Speed:

19200, 9600, 4800 or 2400 bps in fast poll mode
 0-1800 bps in Bell 202T mode
 0-1200 bps in ITU-V23 mode

Data Format: Asynchronous, 8 or 9 data bits

10- or 11-bit character with 1 or 2 stop bits

Modulation

QAM for 19200, 9600, 4800 and 2400 bps in fast poll mode

FSK for 0-1200 or 0-1800 for V23 or Bell 202T mode

Modem Equalizers

Automatic & adaptive equalizer

Enhanced fixed cable equalizers for extended range

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: 5-position terminal block with safety ground.

DTE/RTU Interface

The modem provides serial ports to support both the RS-232 and RS-485 interface standards:

RS-232 Interface

Connector: DB9-F

Signals: RTS, CTS, CD, TD, RD, DSR, SG

RS-485 Interface

Connector: RJ-11

Signals: 4-wire full-duplex:

TX+, TX-, RX+, RX-

Front Panel Indicators & Controls

LED. Indicators:

RTS, CTS, TD, CD, RD, DSR, ALB, DLB

TEST Switch:

Push Button for Analog Loopback, Digital Loopback, and Remote Digital Loopback

Power Supply Specifications

Three models support various power options:

Stand-alone: 90-264 VAC

Stand-alone: 10-48 VDC

Rack mount: RM16M module

Power Consumption:

Idle mode: 1.0 watts

Normal mode: 2.0 Watts, typical

Mechanical Specifications

Enclosure dimensions:

5.0"(W) x 6.75"(L) x 1.3" (H)

127mm(W) x 172mm(L) x 33mm(H)

Weight: 1.0 pound, without AC power module

Environment Specifications

Temperature:

Operation: -40° to +85° C

Storage: -40° to +100° C

Humidity:

Up to 95 % non-condensing

Dry Contact Detection (optional)

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

Model Numbers and Optional Features

SM19202FP: Stand-alone with AC power supply
 90-264 VAC or 115-400 VDC

SM19202FP-DC: Stand-alone, DC power,
 SM19202FP-DC 10-60 VDC

SM19202FP-DIN: Stand-alone with AC power supply
 AC Power w/ DIN Rail mounting option

SM19202FP-DC-DIN: Stand-alone, DC power,
 10-60 VDC w/ DIN Rail mounting option

SM19202FP-RM

RM16 rack-mount plug-in module

