

High-Speed Fast-Poll Modem for Industrial Communications

The DSP19.2 Fast Poll modem is designed and manufactured from the ground up for rugged industrial communication networks. Boasting the latest innovative digital signal processing (DSP)-based communication device, the DSP19.2FP delivers a cost-effective 19200 bps asynchronous solution for point-to-point and multipoint connectivity.

The DSP19.2FP Fast-Poll modem is ideal for industrial communication applications including SCADA systems, RTUs, traffic monitor and control, and industrial automation networks. The DSP19.2FP supports RTUs with an EIA RS-232 or RS-485 serial port at speeds of 19200, 9600, 2400, and 1200 bps.

The DSP19.2FP 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 DSP19.2FP 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 DSP19.2FP 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, 2400, or 0-1800 bps

QAM modulation for 19200, 9600, or 2400 bps over Telco 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 short RTS/CTS delay

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

Cable equalizer extends operating distance over unloaded cables

Built-in remote diagnostics and configuration management

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 of operating temperatures

General Specifications

Data Rate Support

Data Speed:

- 19200, 9600, 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 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: 2 watts

Normal mode: 5 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

DSP19.2FP: Stand-alone with AC power supply
90-264 VAC or 115-400 VDC

DSP19.2FP-DC: Stand-alone, DC power only
SM19202FP-DC 10-48 VDC

DSP19.2FP-01: Stand-alone with AC power supply
AC Power w/ Dry contact option

DSP19.2FP-02: Stand-alone, DC power only
DC Power w/ dry contact option

DSP19.2FP-RM
RM16 rack-mount plug-in module

