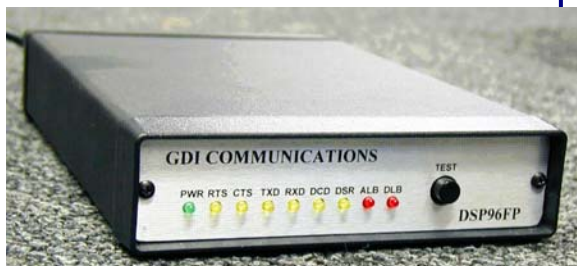




Model DSP Series Fast Poll Modem



Description

The GDI DSP-FP FAST POLL modem series features a dual mode full-featured Fast Poll and Bell 202T leased line modem with the fastest training time in the industry: 17.5 ms (19,200 & 9600) RTS/CTS delay. The DSP419FP series modems are the only 19,200 bps fast poll modems currently available and coupled with the fastest training time in the industry, the GDI DSP-FP series can provide up to 24% more data than any other modem in the market.

The GDI DSP-FP series modems are ideal for multi-drop applications and utilize the latest digital-signal processing (DSP) technology to achieve high performance.

The DSP419FP and DSP496FP series are excellent Limited Distance Modems for 4-wire full duplex or 2-wire half duplex operation over private metallic circuits which can provide communications up to 16 miles at 9600 bps over 22 AWG cable. If the DSP-FAST POLL modem is utilized over TELCO voice band line, the distance achievable is virtually unlimited.

In Fast Poll mode (19,200 (DSP419 Series Only), 9600, 4800, 2400 bps), the GDI DSP series employs a proprietary modulation and encoding scheme to achieve fast modem training time. In Bell 202T Mode, the modem is also backward compatible with Bell 202T (0-1800 bps) modems

FEATURES

- * Dual Mode: 19,200, 9600, 4800, 2400 bps and FSK, Bell 202T, 0-1800 bps (model dependent)
- * Fast Train modem equalizer with 17.5 ms RTS/CTS delay (19,200 & 9600 bps)
- * DSP design with automatic adaptive equalizer
- * Leased Line interface protected with heavy-duty surge protection
- * Available in standalone and rack mount versions
- * Low voltage model available

The GDI DSP-FP series is engineered for fast receiver training and synchronization. It is ideal for systems where fast response, short training and low throughput is required to achieve highest performance .

The dual mode capability allows the GDI DSP-FPOLL series to communicate with existing Bell 202T (0-1800 bps) modems. At a later date, when the Bell 202T modems are replaced with GDI DSP-FP standalone or rack mount modems, the entire system can be upgraded to 9600 or 19,200 bps (model dependent) by setting a couple of dip switches.

DSP496FP
Single Modem



DSP896FP
Dual Modem



GDI Communications LLC
PO Box 1330, Verdi, NV 89439

Ph: 775-345-8000 Fax: 775-345-8010 E-mail: sales@sgdi.net



Model DSP Series Fast Poll Modem

General Specifications

Data Rate Support	DSP419FP: Fast Poll Mode: 19200, 9600, 4800 or 2400 bps Bell 202T Mode: 0-1800 bps ITU-V23 Mode: 0-1200 bps
	DSP496FP: Fast Poll Mode: 9600, 4800 or 2400 bps Bell 202T Mode: 0-1800 bps ITU-V23 Mode: 0-1200 bps

Data Format	Asynchronous 8 or 9 data bits 10 or 11-bit character with 1 or more stop bits
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Line Requirement	TELCO voice band 4 or 2 wire leased line Private metallic circuits, 4 or 2 wire, 26 to 19 AWG
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Operating Modes	2-wire half duplex or 4-wire full duplex
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Modulation	QAM for 19,200, 9600, 4800, 2400 bps in fast poll mode FSK for 1-1200 or 0-1800 for V.23 or Bell 202T mode
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Equalizer	Automatic & adaptive equalizer Enhanced fixed cable equalizers for extended range
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Training Time	RTS to CTS Delay 2400 & 4800 bps - 23 ms 9600 bps - 23ms, Turbo Mode 17.5 ms 19,200 bps - 17.5 ms Bell 202T Mode: 8 or 33 ms
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Cable Equalizer	Fixed Transmitter and Receiver cable equalizer, selectable
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Carrier Control	Constant or switched, Dip switch selectable
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Carrier Loss Recovery	Built-in Train on Data
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Receiver Dynamic Range	0 to -30 dBm or -10 to -43 dBm (Dip switch selectable)
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Input Voltage Requirements

Standalone	10 to 53 VDC (85 to 265 VAC, 50/60 HZ with external power supply)
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Rack Mount	± 12 VDC
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Power Consumption @ 12 VDC	Typical 1.5 watts, Max 1.75 watts
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Surge Protection	Provided at power line and leased line (up to 15 KV, standalone version)
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Mechanical

Standalone	5.75"W x 8.4"D x 1.54"H 1.9 lb
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Rack Mount	9"D x 6.25"H x 0.87"T 8 oz
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Temperature	Operating: -40 to +85 C Storage: -40 to +85 C
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Interface Connectors

Leased Line/ Private Wire	4-position screw terminal.
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Power Supply	3-position screw terminal
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Data Terminal Equipment	DB-25 Female
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Diagnostic Features

Front Panel LED for Status Monitoring	Power (PWR) Request to send (RTS) Clear to send (CTS) Data set ready (DSR) Data Carrier Detect (CD) Transmit Data (TD) Receive Data (RD) Analog loopback (ALB) Digital loopback (DLB)
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Front Panel loopback control for testing	Local Analog loopback (ALB) Local Digital loopback (DLB) Remote Digital loopback (RDL)
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DTE/RTU Interface

The modem provides a serial port to support either the RS-232 or optional RS-485 interface standard:

RS-232 Interface

Connector:	DB25-F
Signals:	RTS, CTS, CD, TD, RD, DSR, SG

RS-485 Interface

Connector:	DB25-F
Signals:	4-wire Full-Duplex or 2 wire H.D. TX+, TX-, RX+, RX-

Ordering Guide:

DSP419FP—Int 170/Rack Mount Single Modem Card (19,200 bps)
 DSP496FP—Int 170/ Rack Mount Single Modem Card (9600 bps)
 DSP819FP—Int 170/Rack Mount Dual Modem Card (19,200 bps)
 DSP896FP—Int 170/Rack Mount Dual Modem Card (9600 bps)
 DSP419FP-SA—Standalone Modem (19,200 bps)
 DSP496FP-SA—Standalone Modem (9600 bps)

Specifications subject to change without notice

GDI Communications LLC
PO Box 1330, Verdi, NV 89439
Ph: 775-345-8000 Fax: 775-345-8010 E-mail: sales@sgdi.net