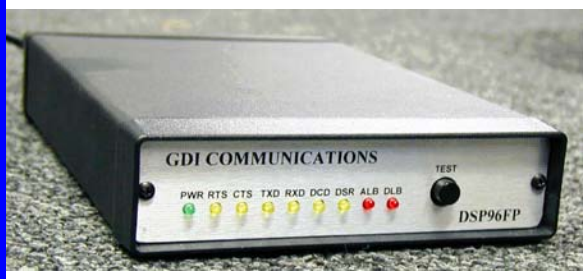
GDI Communications LLC
Transportation Communications Specialists

Model DSP Series FlashPoll Modem



FEATURES

* **Dual Mode: 9600/4800 bps and FSK, Bell 202T, 0-1800 bps**
* **Fast Train modem equalizer with 23 ms RTS/CTS delay**
* **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**

Description

The GDI DSP-FP modem series features a dual mode full-featured 9600 Fast Poll and Bell 202T leased line modem with the fastest training time in the industry: 23 ms RTS/CTS delay. The GDI DSP-FP series modems are ideal for multi-drop applications.

The GDI DSP-FP series is designed for 4-wire full duplex or 2-wire half duplex operation over voice-based leased lines or private metallic circuits. The modem utilizes the latest digital-signal processing (DSP) technology to achieve high performance.

In FlashPoll mode (9600/4800 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

Ideal for systems where fast response, short training and low throughput delay is required, the GDI DSP-FP series is optimized for fast receiver equalizer training and extremely high throughput

The dual mode capability allows the GDI DSP series to communicate with existing Bell 202T (0 -1800 bps) remote modems, which then can be upgraded at a later date to GDI DSP series stand-alone or rack mount modems.

DSP496FP
Single Modem

DSP896FP
Dual Modem

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General Specifications

Data Format	FlashPoll Mode: 9600 , 4800 or 0-1800 bps asynchronous
Data Format	8 or 9 data bits with 1 or more stop bits
Line Requirement	TELCO voice band 4 or 2 wire leased line or Private metallic circuits, 26 to 19 AWG
Operating Modes	2-wire half duplex or 4-wire full duplex
Modulation	Proprietary (FlashPoll mode) and FSK (Bell 202T mode)
Equalizer	Automatic, adaptive
Training Time	RTS to CTS Delay FlashPoll Mode: 23ms Bell 202T Mode: 8,33,59,219 ms
Cable Equalizer	Fixed Transmitter and Receiver cable equalizer, selectable
Carrier Control	Constant or switched, Dip switch selectable
Carrier Loss Recovery	Built-in Train on Data
Receiver Dynamic Range	0 to –30 dBm or –10 to –43 dBm (Dip switch selectable)
Operating Temperature	-40°C to +85°C

Input Voltage Requirements

Standalone	85 to 265 VAC, 50/60 HZ or 10 to 53 VDC
Low Voltage Standalone	10 to 53 VDC
Rack Mount	Supplied by rack
Surge Protection	Provided at power line and leased line (up to 15 KV, standalone version)

Mechanical

Standalone	5.75”W x 8.4”D x 1.54”H 1.9 lb
Rack Mount	9”D x 6.25”H x 0.87”T 8 oz

Interface Connectors

Connectors	4-position screw terminal. 2 or 4-wire leased line or metallic circuit (DC currently not supported)
Data Terminal Equipment	DB-25 Female

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 (DCD) Transmit Data (TXD) Receive Data (RXD) Analog loopback (ALB) Digitial loopback (DLB)
Front Panel loopback control for testing	Local Analog loopback (ALB) Local Digital loopback (DLB) Remote Digital loopbak (RDL)

RS-232 (DTE) Interface

Signal Name	Modem Input/ Output	DB25	Pin Description
Earth	GND	1	Earth Ground
TXD	Input	2	Transmit Data
RXD	Output	3	Receive Data
RTS	Input	4	Request to send
CTS	Output	5	Clear to send
DSR	Output	6	Data set ready (modem ready)
SG	GND	7	Signal Ground
DCD	Output	8	Data Carrier Detected
DTR	Input	20	Data Terminal Ready (host ready)

NOTE: DCD active indicates that carrier is present and data at RXD is valid. DCD is not an energy detector.

Ordering Guide:
DSP496FP—Internal 170 Single Modem Card
DSP896FP—Internal 170 Dual Modem Card
DSP496FP-SA—Standalone Modem

Specifications subject to change without notice

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