

# FlashPoll™

## DSP9612FP



The Telenetics FlashPoll DSP9612FP is a dual mode, full-featured 9600 Fast Poll and Bell 202T leased line modem with the fastest training time in the industry: 23msec RTS/CTS delay. Ideal for utility and industrial automation multi-dropping applications, including SCADA systems, traffic automation and oil & gas automation projects, where an unlimited number of drops is desirable.

The DSP9612FP is a standalone modem designed for 4-wire, full-duplex or 2-wire, half-duplex operation over a voice-band leased line. The modem design utilizes the latest digital-signal processing (DSP) technology to achieve high performance.

In FlashPoll Mode (9600/4800 bps), the DSP9612FP employs Telenetics' 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 time and low throughput delay is required, FlashPoll is optimized for fast receiver equalizer training and extremely low throughput delay.

The dual mode capability allows the DSP9612FP to communicate with existing Bell 202T (0-1800, bps) remote modems, which can then be upgraded at a later date to a Telenetics DSP9612FP FlashPoll standalone or DSP9612RM Rack Mounted modems (see separate Data Sheet No 0120 0601).

*The Telenetics® FlashPoll™ modems are designed to optimize communication links where high speed or an unlimited number of drops is necessary.*

- ▲ *Dual Mode: 9600/4800 bps and FSK*
- ▲ *Fast train modem equalizer with 23 msec RTS/CTS delay*
- ▲ *DSP design with automatic adaptive equalizer*
- ▲ *Leased-line interface protected with heavy-duty surge protection*
- ▲ *Installs in the Telenetics and Motorola/UDS RM16M Universal Data Shelf™.*

**FOR MORE INFORMATION ON THE  
FLASHPOLL AND FAST POLL  
MODEMS SERIES CONTACT  
TELENETICS AT:**

**949-455-4000 or visit  
www.telenetics.com**

Powered by 85 to 265 VAC, 50-60Hz, the modem will also operate from 85 to 400 volts DC. The Leased line is protected by heavy duty surge protection circuitry that can withstand surge voltage of up to 15KV.

### Mechanical Specifications

Enclosure	Aluminum with removable front and rear panel
Dimensions	5.70" wide x 8.30" long x 1.50" high
Weight	1.9 lb.

### 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 connector

### 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.

### Diagnostic Features

#### Front panel L.E.D. for status monitoring:

Power (PWR)	Data carrier detect (DCD)
Request to send (RTS)	Data set ready (DSR)
Clear to send (CTS)	Analog loopback (ALB)
Transmit data (TXD)	Digital loopback (DLB)
Receive data (RXD)	

#### Front Panel loopback control for testing:

Local Analog Loopback (ALB)
Local Digital Loopback (DLB)
Remote Digital Loopback (RDL)

### General Specifications

Data rate	9600 or 4800 bps asynchronous, +1% - 2.5%
Data format	8 or 9 data bits with 1 or more stop bits
Line requirement	TELCO Voice band 4 or 2 wire leased line Private metallic circuits, 26 to 19 AWG
Operating modes	2-wire half-duplex or 4-wire full-duplex
Modulation	Telenetics proprietary
Equalizer	Automatic, adaptive
Training time	RTS to CTS delay, 23 ms
Cable equalizer	Fixed transmitter and receiver cable equalizer, selectable
Power supply	Wide range switching power supply, 85 to 265V, 50/60 Hz, or 85 to 400VDC. Optional DC voltage, 10 to 53 volts DC
Surge protection	Provided at power line and leased line Up to 15KV (Standalone version)
Carrier Control	Constant or switched, DIP switch selectable
Carrier loss recovery	Built-in Train on Data (typically less than 10 sec)
Receiver Dynamic Range	+3 to -30 dbm or -10 to -43 dbm (DIP switch selectable)
Operating Temperature	-40°C to +85°C

### Rear Panel



Telenetics Corporation  
25111 Arctic Ocean Drive  
Lake Forest, CA 92630  
Tel: 949.455.4000  
Fax: 949.455.4010

For more information on the FlashPoll and other FastPoll Series by Telenetics please contact us at:

949-455-4000 or visit  
[www.telenetics.com](http://www.telenetics.com)