

# 2<sup>nd</sup> GENERATION DSP FlashPoll • DSP9612FP and DSP9612-LV INDUSTRIAL MODEM

#### **KEY FEATURES**

- Designed to optimize communication links where high speed or an unlimited number of drops is necessary.
- Dual Mode: 9600/4800 bps and FSK, Bell202T 0-1800 bps
- 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
- DIN Mount or Wall Mount options available.
- Powered by 85-265VAC, 85-400VDC

#### PERFORMANCE & APPLICATION

The **Raymar-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: 23 msec 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.

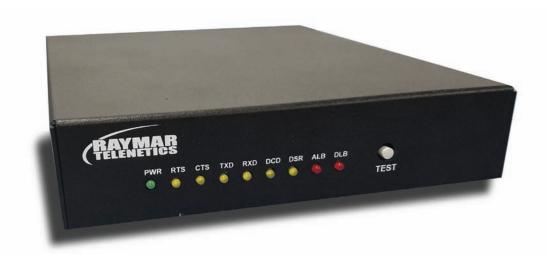
The DSP9612FP is a standalone modem designed for 4-wire, full-duplex, or 2-wire, half-duplex operation over a voice-band leased line or private wires. The modem design utilizes the latest digital-signal processing (DSP) technology to achieve high performance.

#### **COMPATIBILITY**

In FlashPoll Mode (9600/4800 bps), the DSP9612FP employs **Raymar-Telenetics**' proprietary modulation and encoding scheme to achieve fast modem training time. In Bell 202T Mode, the modem is end-to-end backward compatible with Bell 202T (0 - 1800 bps) modems.

### **OPTIMIZATION & CAPABILITY**

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.



RAYMAR INFORMATION TECHNOLOGY, INC.

7325 Roseville Road Sacramento, CA 95842

Phone +1-916-783-1951 FAX +1-916-783-1952

sales@raymarine co

1-800-695-1951

Tech Support Hotline 1-800-747-1522

www.raymarinc.com

## FLASHPOLL • DSP9612FP • DUAL MODE MODEM

# PRODUCT SPECIFICATIONS

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.

#### **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: Raymar-Telenetics proprietary

FlashPoll Mode/FSK Bell202T Mode

Equalizer: Automatic, adaptive

Training Time: RTS to CTS delay, 23 msec

**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 LVDC,

DSP9612-LV 10 to 53 volts DC.

**Surge Protection:** Provided at power line and

leased line. Up to 15K (Standalone version)

Carrier Control: Constant or switched, DIP

switch selectable

Carrier Loss Built-in train on Data

**Recovery:** (typically less than 10 sec)

Receiver Dynamic +3 to -30 dbm or -10 to -43

Range: dbm (DIP switch selectable)

Operating -40°C to +85°C

Temperature:

### **MECHANICAL SPECIFICATIONS**

**Enclosure:** Aluminum with removable

front and rear panel

**Dimensions:** 5.70"W x 8.305"L x 1.50"H

Weight: 1.9 lb

#### **INTERFACE CONNECTORS**

**Connector:** 4-position screw terminal,

2- or 4-wire leased line or

metallic circuit

Data Terminal

DB-25F power connector

**Equipment:** 

# **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 (HostReady)

Note: DCD active indicates that carrier is present and data RxD is valid. DCD is not an energy detector.

### **DIAGNOSTIC FEATURES**

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

Power (PWR)

Request to send (RTS)

Clear to send (CTS)

Transmit data (TXD)

Data carrier detect (DCD)

Data set ready (DSR)

Analog loopback (ALB)

Digital loopback (DLB)

Receive data (RXD)

# Front panel loopback control for testing:

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



Raymar-Telenetics manufactured products are warranted against defects in hardware material and workmanship under normal use for one (1) year from date of original retail purchase. Defective product will be repaired or replaced, determination to be made by Raymar-Telenetics, at no charge. Repaired or replaced products are warranted for 90 days or for original warranty period, whichever is longer. Warranty extends to original end-user only.



Manufactured in the USA by RAYMAR-TELENETICS