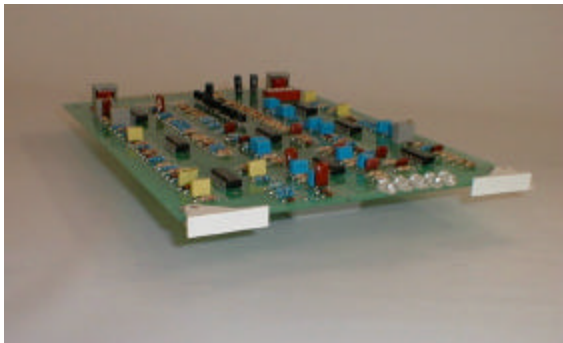




Model 400

Series Modems

Models 400, 400F, 400NY, 404
419, 496 Cards and Standalone



FEATURES

- * 1200 to 19,200 bps
- * Intergal Power Supply
- * RS232 Interface
- * 2 & 4 Wire Switchable
- * Rugged Metal Enclosure
- * Switch Selectable Timings
- * Bell 202T Type (400 only)
- * Model 170/179 Style Card
- * Temperature Hardened
- * Anti-Streaming Option

Description

The GDI Series 400 Modems are the most versatile models for private wire and Telco 3002 interconnect. There are 11 versions of standalones and card for different applications. Begin with the industry standard Model 400 at 1200 bps, add anti-streaming for the Model 400F/400NY and 2400 bps for the Model 404. Then raise the speed to 9600 or 19,200 bps for Models 496 and 419 respectively. They are temperature tested rugged modems designed for the transportation industry. Directly connected to traffic controllers or variable message signs, they communicate at 1200 bps over leased telephone lines or higher speeds via private wire interconnect. Both point-to-point and multi-drop, the GDI Series 400 modems offer data rates of 1200 to 19,200 bps. The internal fused power supply on the standalone model eliminates the common "Brick" external transformer.



Specifications — General

Environmental Operating Ranges

Temperature Range	-37 to + 74°C
Humidity	95% non-condensing

Modem

Modulation	Frequency Shift Keying
Data Interface	RS-232C compatible via DB9F for standalone and Model 400 for card
Mechanical	Standalone case 1.5"H X 5."W x 8.5"D Card Model 400 standard

Industrial Grade Modems

34145 Pacific Coast Highway, Ste 334, Dana Point, CA 92629
Phone: 949-463-6560, Email: sales@industrial-grade-modem.com



Model 400

Series Modems

Models 400, 400F, 400NY, 404 419, 496 Cards and Standalone

Models, Frequencies & Data Rates

Model	Mark Hz	Space Hz	Soft Carrier Hz	Data Rate
400	1200	2200	900	0-1200
400F	1200	2200	900	0-1200
400NY	1300	2100	900	0-1800
404	2400	4400	1800	0-2400
496	11200	17600	7800	0-9600
419	19200	38400	13800	0-19200

Power Requirements

Standalone:

Voltage	90 to 130 VAC (Standard) 180 to 260 VAC (Optional)
Frequency	47 Hz to 63 Hz
Power	4 watts maximum

Card:

+12 volts and 12 volts \pm 5% @ 75 mA

Indicators

XMT	Transmit Data
RCV	Receive Data
RTS	Request To Send
CTS	Clear To Send
DCD	Carrier Detect
MR	Modem Ready (standalone only)

Timing (Switch Selectable)

Function	Model 400	All other Models
RTS—CTS	12mS + 2mS	6 or 12 mS + 2mS
CAR Delay	8mS + 2mS	4 or 8 mS + 2mS
Soft Carrier Off	10mS + 2mS	5 or 10 mS + 2mS
Rcvr Squelch	6.5mS + 2mS	3 or 6 mS + 1mS
Anti-Streaming	None	Switchable on/off

Receiver Characteristics

Dynamic Range	+3dBm to -48dBm
Carrier Detect Threshold	-42 \geq 3 dBm
Carrier Detect Hysteresis	3dB
Demodulator Distortion	<10% peak

Transmit, Level & Duplex

-8 dBm to 0 dBm potentiometer adjustable
2 wire half duplex, 4 wire full duplex switch selectable
Transmit Frequency Tolerance +1%

Multidrop Capability

Recommend a maximum of 8 units per line. More can be used if the line is short, low noise or controller software configuration allows.

Line Interface

4 Wire Interconnect Positions

Pin	Function	Direction
1	Data Tip Rec.	In
2	Data Ring Rec.	Return
3	Data Tip Trans.	In/Out
4	Data Tip Trans.	Return

All Model 400 modems above are enhanced replacements designed to take advantage of newer traffic controllers and other products capable of higher speeds. System communications with our Series 400 modems can be improved due to the selectable timing, anti-streaming and transmitter options.

Model Numbers for Ordering

Card Model	Standalone Model
400, 400F	400SA
400NY	400NYSA
404	404SA
496	496SA
419	419SA

Specifications subject to change without notice

Industrial Grade Modems
34145 Pacific Coast Highway, Ste 334, Dana Point, CA 92629
Phone: 949-463-6560, Email: sales@industrial-grade-modem.com