



# ENGINEERING

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## Compact Servo Drive

P/N G000447

### 2 Board Stack

Design separates the servo controller and power stages.

Allows for using the same servo controller and user software interface on different power stages. Provides a unified interface to the customer regardless of drive configuration

### 3 Phase Drive

Power stage is designed for trapezoidal drive with hall effect feedback. Modular design allows for reconfiguring drive stage for sinusoidal drive, or sensor less operation as needed

### Compact and Reconfigurable

The power stage can be made for application specific mounting and I/O

### Integrated Rotary Encoder

Unit has magnetic rotary encoder integrated for mounting over rotating shaft. System can be configured to accept external position feedback sensors.

### Software

2G provides configuration software with charting / logging for system tuning and LabVIEW drivers.



~ 75 x 38 x 18 mm size



All of 2G's products are designed in house. Including software and hardware. We are beholden to no 3<sup>rd</sup> parties for modifications of the design to meet a customer's requirements.

Therefore, if a customer needs support or a new feature added to the servo controller it can be implemented and deployed quickly.

Review the [command set document](#) for an idea of the standard features the servo drive supports.

If there are needs for features not listed we can add them.

### Industry specific highlights

- Designed for PBOF usage
- Tested to 10,000 PSI
- API 17F Q1 capable
- High TRL level achievable out of the box

### Standard Servo drive features

- Cascaded PID loops for position and velocity control
- Motion profiler for controlled acceleration rates
- Feed forward and inertia compensation

### Standard power drive stage

- 150 V DC operation
- 12 A RMS motor current
- 25A peak

### Optional power drive stage

- 400V DC Operation
- 10 A RMS motor current
- 20A peak

### Control Interface (Isolated)

- RS-232
- RS-485 (2x redundant)
- CAN Bus
- Analog
- Optional Ethernet

### Software protocols

- 2G Packets
- MODBUS RTU or ASCII
- CAN Frames
- CAN Open (Optional)
- MODBUS TCP (Optional)
- Others per Customer needs

2G Engineering has an AS 9100 /

ISO 9001 Approved QMS system.

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