

R256

SINGLE AXIS CONTROLLER + DRIVER



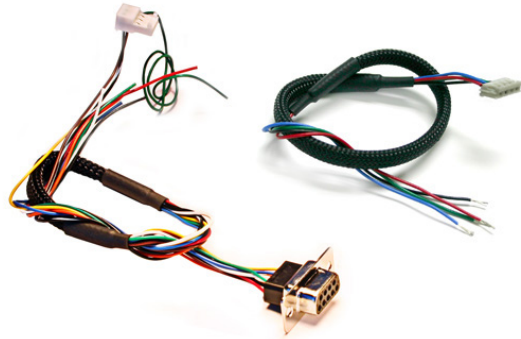
FEATURES & BENEFITS

- Input Voltage of +12 to 40 VDC
- Phase Current Ranges from 0.2 to 2.0 Amps Peak
- Full step, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/128, 1/256
- RS485 Communication with Optional Converter Cards Available
- 2 User Configurable Digital I/O's
- 2 Dedicated Inputs:
 - 1 Optical Sensor for Homing
 - 1 Switch Closure to Ground
- Fully Programmable Ramps and Speeds
- Software Selectable Hold and Move Currents
- Stand Alone Operation with No Connection to PC
- Stores up to 16 Different Programs at Once with 4 kBytes of Memory

OPTIONS

Each R256 comes with the following cables
 (Lin part number 090-00044 and 090-00018):

DB-9 cable with white 3-pin connector | 4-pin cable



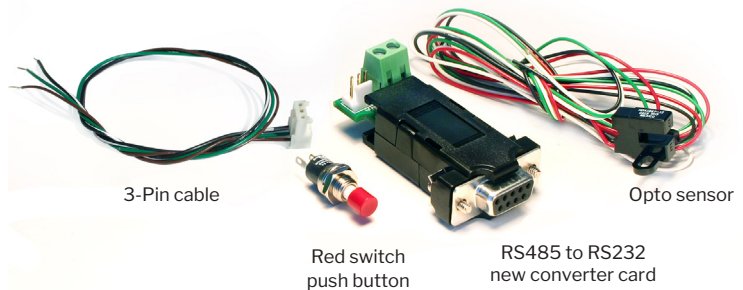
• The R256 is a fully intelligent controller and driver in one. Commands can be issued from any serial terminal program, such as HyperTerminal, or from the Windows Application Program

• Commands are simple and intuitive. For example, A1000 will move a stepper motor to Absolute Position 1000. This communication is compatible with devices that use the Cavro DT or OEM protocol.

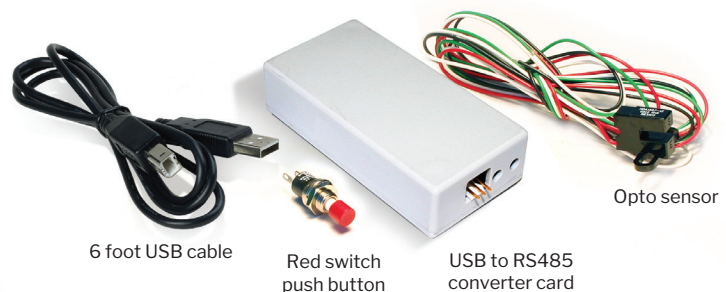
• The R256 controller is also capable of stand alone operating with no PC. It can execute a pre-programmed string of commands upon Power up. Commands include nested loops, wait statements, halt commands, software selectable currents, speeds, acceleration, microstepping, and more.

The Designer's Kit (sold separately) enables first time users to become well acquainted with the options of R256 Controller/ Driver.

RS485 Designer's Kit (Lin P/N: RS232KIT) includes:



USB485 Designer's Kit (Lin P/N: USBKIT) includes:

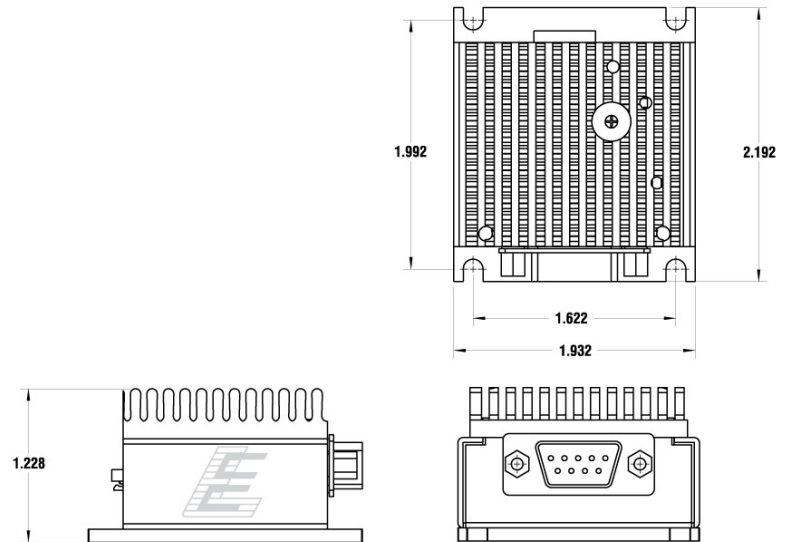


ELECTRICAL SPECIFICATIONS

| | |
|------------------------------------|---|
| Input Voltage | +12 to 40 VDC |
| Drive Current(Per Phase) | 0.2 to 2.0 Amps Peak |
| Isolated Inputs | I/O, Switch Closure to Ground, Opto Phototransistor |
| Step Frequency (Max) | 16.77 MHz |
| Steps Per Revolution (1.8° Motor) | 200, 400, 800, 1600, 2000, 3200, 5000, 6400, 10000, 12800, 25000, 25600, 50000, 51200 |
| Microstep Resolutions (1.8° Motor) | Full step, 2X, 4X, 5X, 8X, 10X, 16X, 25X, 32X, 50X, 64X, 125, 128X, 250X, 256X |

| Function (Command) | Description |
|--------------------------|---|
| Running Current (m) | 30% of 2.0 Amps |
| Holding Current (h) | 10% of max current of 2 Amps |
| Step Resolution (j) | 256x |
| Top Velocity (V) | 305175 pps (microsteps/sec) |
| Acceleration (L) | L=1000, 6103500 usteps/sec ² |
| Microstep smoothness (o) | 1500 |
| Outputs (J) | both are turned off, J0 |
| Baud Rate | 9600 bps |

DIMENSIONS



PIN OUTS

| PIN NUMBER | FUNCTION |
|------------|----------------------------------|
| 1 | +12 to 40 VDC |
| 2 | I/O |
| 3 | RS485B |
| 4 | RS485A |
| 5 | Switch Closure to GND (in) |
| 6 | Power Ground |
| 7 | Opto Sensor Phototransistor (in) |
| 8 | I/O |
| 9 | Opto Sensor LED(Power Out) |

CONNECTORS

A DB-9 male connector provides power and control connections. Mating connector provided.



Motion Control, Solved.

MOTOR ENGINEERING & MANUFACTURING



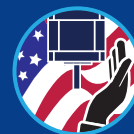
Optimized
For Your
Application



Quick
Prototype
Turnaround



Small Batch
to OEM Volume
Production



US Based
Support &
Manufacturing