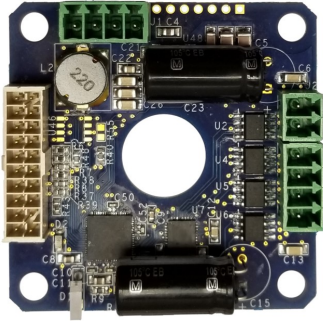


DATASHEET



Absolute Encoders

OMDE2 Integrated Single Axis Drive & Control with Encoder

The OMDE2 is an advanced stepper motor drive and motion controller with encoder feedback input in one small compact size. Through a simple RS485 communications interface you can control a stepper motor with exceptional capabilities and accuracy with simple ASCII character commands. Incremental encoder feedback provides high resolution and speed for critical applications. Selectable velocities up to 2M steps/sec. Motor step size resolution is selectable up to 1/256 microstep. Its small design is compatible to mount on a NEMA 23 stepper motor or remotely, and includes a hole in the center so the shaft of a linear actuator motor can pass through when mounted on the motor.

FEATURES

- Advanced motion control capabilities
- Absolute Encoders (BiSS & SSI, 36+ bit resolution)
- Simple communications through RS485 interface (Modbus option)
- Commands are intuitive ASCII characters (Modbus RTU option)
- Communication speed = 115.2K Baud
- Velocity = 0 to 2M steps per second
- Differential Quadrature Incremental Encoder up to 16MHz
- Microstep resolutions include full, 1/2, 1/4, 1/8, 1/16, 1/64, 1/128, 1/256
- Exceptional accuracy: +/- 0% position (full-steps)
- 6 TTL input/output, including Home and +/- Limits
- Single supply voltage +12V to +50V
- 0 to 2.5 amp phase current for high torque motors
- Center pass-through hole for linear actuator stepper motors
- No heat-sink required for typical current
- Motor current set through the interface
- Matches the NEMA 23 dimension for direct motor mounting
- Use existing motors or select optimum motor for the application for cost control and best performance
- Screw-terminal connector plugs for convenient wiring
- LED indicator for status

“The Company in Motion”™

OMS Motion, Inc.

15201 NW Greenbrier Pkwy, B-1
Beaverton, Oregon 97006

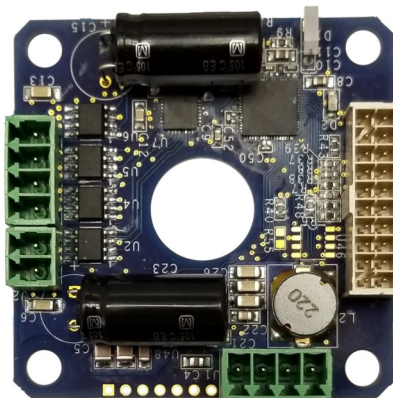
503-629-8081, Fax: 503-629-0688

E-mail: Sales@OMSmotion.com

www.OMSmotion.com

Connector Pin-out

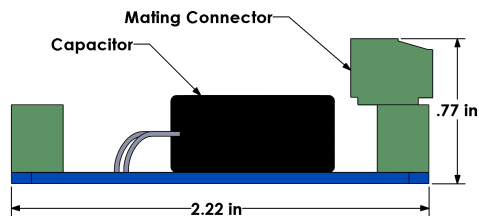
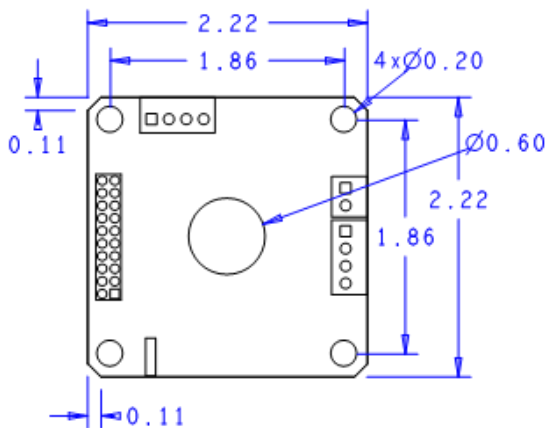
J3 -Pin4: Phase B2
 J3 -Pin3: Phase B1
 J3 -Pin2: Phase A2
 J3 -Pin1: Phase A1
 J2 -Pin2: GND
 J2 -Pin1: 12-50VDC



J4			
VIO / +5V	01	02	GND
GPIO0	03	04	GND
GPIO1	05	06	GND
Home / GPIO2	07	08	GND
Neg Lmt / GPIO3	09	10	GND
Pos Lmt / GPIO4	11	12	GND
Indx+	13	14	Indx-
PhB+	15	16	PhB-
PhA+	17	18	PhA-
+5V	19	20	GND

J1
 RS485

Dimensions



ORDERING INFORMATION	
Model	Description
OMDE2	Drive & Controller w/ Encoder, Size 23

OMS Motion, Inc.

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