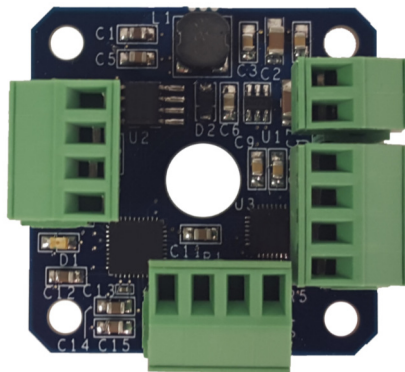


OMD18

The OMD18 is an integrated fractional stepper motor driver with motion controller in a small compact size. The OMD18 small design is compatible to mount on a NEMA 17 stepper motor, and includes a hole in the center so the shaft of a linear actuator motor can pass through when mounted on the motor. Motor phase current and step size resolution set through the RS485 communications interface. Travel limit sensor inputs as well as home input are supported. The connectors are screw terminal plugs for easy and secure wiring.



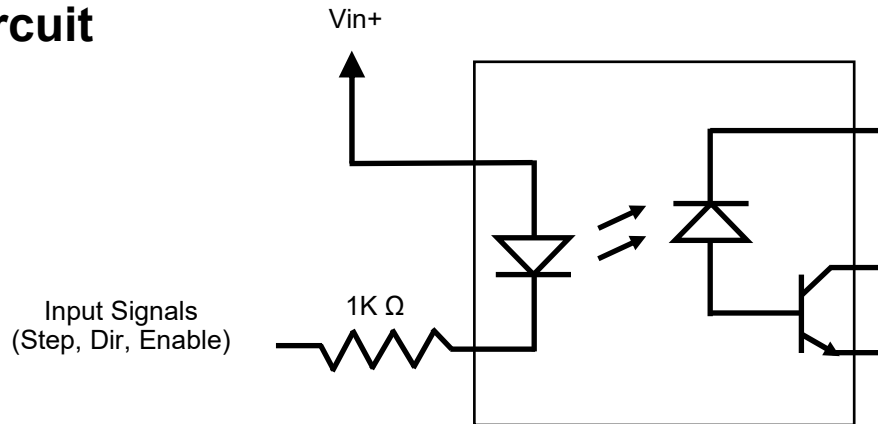
FEATURES

- Integrated design
- Commands are intuitive ASCII characters
- Simple RS485 communications interface (optional Modbus)
- Velocity = 0 to 2M steps per second
- Step resolutions include full, 1/2, 1/4, 1/8, & 1/16
- Single supply voltage +10V to +30V
- 0 to 1.5 amp phase current for high torque motors (1.7A peak)
- Center pass-through hole for linear actuator stepper motors
- No heat-sink required for typical current
- Matches the NEMA 17 dimension for direct motor mounting
- Use existing motors or select the optimum motor for the application for cost control and best performance
- Screw-terminal connector plugs for convenient wiring
- LED indicator for status
- Exceptional value

Electrical Specifications

Parameter	Min	Typ	Max	Unit	Notes
Supply Voltage	8		35	VDC	
Output Current/Phase (PEAK)	0	1.2	1.7	A	Set through RS485 interface
Vin+		5	20	V	
Input Voltage (STEP/DIR/ENABLE)	0		20	V	
STEP frequency	0		2	MHz	The maximum frequency is gated by the optocoupler's circuitry.
High Input Current 20V input 5V input			20 5	mA mA	1K Ohm series resistor on Opto-input

Input Circuit



Environmental Specifications

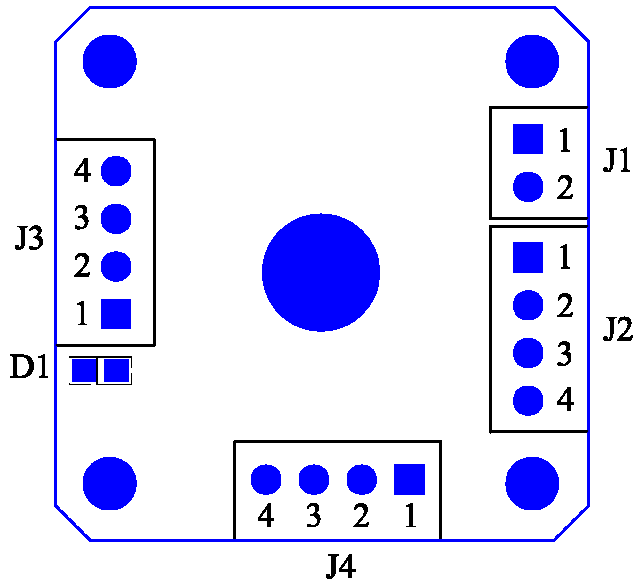
- Operating Temperature..... 0.0 to +50° C
- Storage Temperature..... - 40° to +125° C
- Weight..... 19.8g (including mating connectors)
- Humidity..... 20 to 95% Φ, non-condensing
- Outline..... 1.54" x 1.54" x 0.77" (including mating connectors)



Connector Pin-out

PIN	J3
1	GND
2	D-/B
3	D+/A
4	Vcc / Cfg

PIN	J4
1	GND
2	Pos Limit
3	Neg Limit
4	Home



PIN	J2
1	Phase2
2	Phase2
3	Phase1
4	Phase1

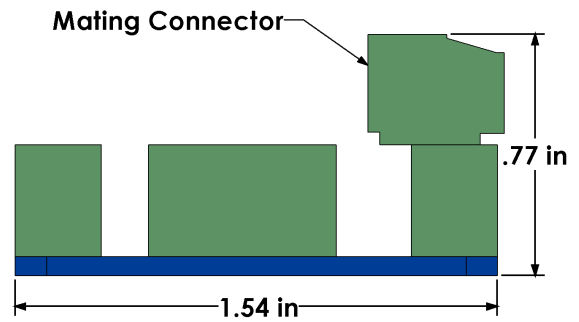
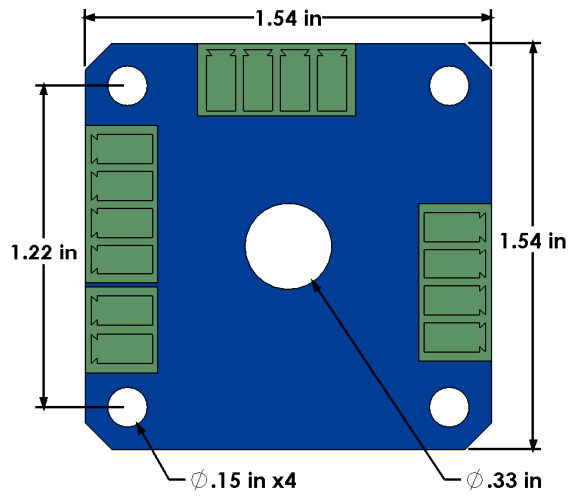
PIN	J1
1	+10 to +30 VDC
2	GND

STATUS LED (D1)

D1, PATTERN	DESCRIPTION
	Short Flash ON Drive disabled (J3,4 short to J3,1)
	Fast Blink Power low / Initialize
	Slow Blink Motor Disabled (ABL = no motor current)
	Flash OFF Motor in Hold Current (no motion active)
	Green On solid Motor in Run Current (motion active)
	Double Flash OFF Transition to Drive Disable (motion active)



Dimensions



Optional Cover



Typical Application



ISO 9001
QMI-SAI Global

1(800) 707-8111, 503-629-8081
Fax: 503-629-0688

Sales@OMSmotion.com

ORDERING INFORMATION	
Model	Description
OMD18	Integrated Drive/Controller, Size 17, 1.5A



www.OMSmotion.com