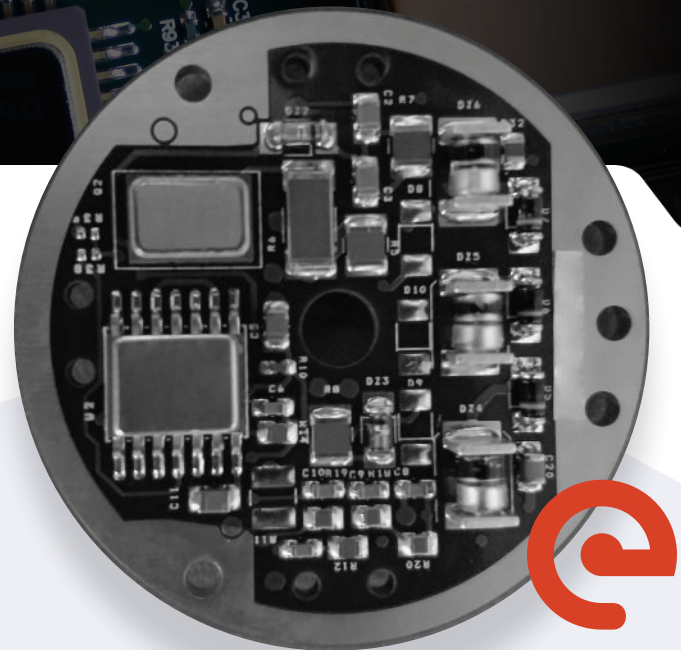







# Echo Motor Controller

## Brushless DC Motor Commutator

Motiv's Echo motor controller provides the user a simple 2-wire interface to control a brushless DC motor. Its compact size allows it to be packaged with the motor making it ideal for deployments or replacing a heritage brushed motor solution.



### FEATURES

-  **Brushless Commutation Enabled Via 2-Wire User Interface**
-  **Drive for Center Tapped WYE Wound BLDC Motor**
-  **Commutation:** Hall Sensor
-  **Operation:** Motor direction changes with reversal of input voltage polarity or with optional logical inputs
-  **Radiation Tolerance:** Total Ionizing Dose 100kRad (COTS and Mil-Spec versions available)



**Operational Temperature Range:** -55°C to +125°C

**Telemetry:** Velocity Indicator Pulse Output; Current Sense Output



**Voltage/Power Handling:** 22V-36V and 1.6A continuous



**Physical Dimension:** 43.2mm Diameter



**Drop-in Replacement For Heritage Brushed Motors**

### SAMPLE APPLICATIONS

- + **Deployment Systems**
- + **Latch Releases**
- + **Pump Controls**

### EXPORT RESTRICTIONS

Export of the Echo Motor Controller is controlled under Export Control Classification Number (ECCN) 9A515.x and is available for sale in the countries listed in Group A:5.



# About Motor Controllers

Motiv designs and delivers advanced motion control solutions for the extreme environments of space. From earth orbit, to deep space, to the cryogenic temperatures of the moon we have solutions to get you moving. Motiv's innovative motor controllers drive everything from robots to deployment mechanisms. In most cases the controllers can be tailored for your specific environment for radiation and parts pedigree to allow you to rapidly move from the lab to flight with the same architecture – saving you time and money.

## PHYSICAL SPECIFICATIONS

Mass:

**17g**

Dimensions:

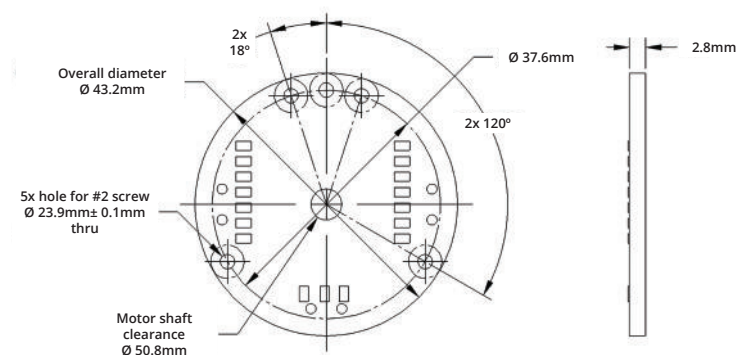
**43.2mm diameter**

Temperature:

**-55°C to +125°C**

System Interfaces:

- **Input Power**
- **Discrete Control Lines**



## ELECTRICAL SPECIFICATIONS

Input Voltage	22V-36V
Current Capability	1.3A
Quiescent Power	<1.5W
Commutation Interface	Halls
Sensory Interfaces	N/A
Radiation Tolerance	100kRad

## PERFORMANCE DATA

Primary Functions:

**Single Axis Brushless Motor Drive**  
**Brushless Motor Commutation**

Primary Applications:

**Deployments, Hinges, Doors, Protective Covers**