

Eagle 50 – Dual Channel Drive

Brushless Permanent Magnet Motor Drive

The Eagle 50 is an innovative dual motor drive that provides up to 50 Amps per motor. The Eagle platform is ideal for robotics applications that require precise motion control and positional accuracy, such as AGVs and other robots utilizing a dual motor system.

Input Voltage: 35 Vdc – 55 Vdc

Continuous Current: 40 Amps (per motor)

Peak Current: Up to 50 Amps (per motor)

Motor Speed: Up to 10,000 rpm

Warranty: One year limited warranty

Separate Logic Voltage: 24Vdc



Motor Options

- Sinusoidal commutation
- Designed for Brushless Permanent Magnet motors
- Compatible with 4, 6, 8, 10, 12, or 14 pole motors
- Differential Hall Effect Sensors
- Encoders (incremental A/B with index, differential)
- Mechanical brake support
- Output for brakes (each channel)

Communication Interfaces and I/O

- CANopen - DS301 and DS402
- 14 pin Molex connector

Environment Ratings

- Storage: -40°C to 85°C
- Operating temperature: -30°C to 50°C
- Withstands 95% relative humidity (non-condensing)

Agency Approvals

- IEC/UL 61800-5-1
- IEC/UL 61800-5-2

Safety Features

- Over current protection
- Internal thermal protection
- External NTC connection
- Over speed protection
- Encoder fault protection
- Under/over voltage protection

Operating Modes

- Cyclic torque
- Velocity

Dimensions and Weight

- Length: 140 mm
- Width: 175 mm
- Height: 35 mm
- Weight: 320 g (11.28 oz) [.71 lb]

Programming and Indicators

- Field programmable firmware
- 48V indicator
- Status indicator
- STO status indicator