

# Osprey 40

## Brushless Permanent Magnet Motor Drive

As part of Nidec's diverse lineup of Ultra Low Voltage drives, the Osprey 40 features an innovative stacked PCB design. This unique layout optimizes the board for a smaller footprint without sacrificing functionality.

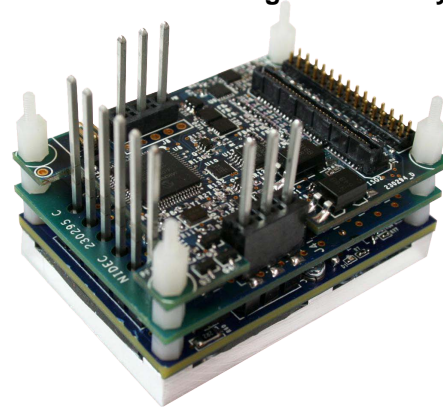
**Input Voltage:** 10 Vdc – 60 Vdc

**Continuous Current:** 20 Amps

**Peak Current:** Up to 40 Amps

**Motor Speed:** Up to 10,000 rpm

**Warranty:** One year limited warranty



### Motor Options

- Trapezoidal or sinusoidal commutation
- Designed for Brushless Permanent Magnet motors
- Compatible with 2,4,6,8,10 or 14 pole motors
- Multiple I/O interface configurations
- Hall effect sensors
- Incremental encoder – A/B with index
- Brake option (open drain FET, 24V 1.0A output)

### Communication Interfaces and I/O

- CANopen - DS301 and DS402
- Digital I/O: 3 inputs/H outputs (5V non-isolated)
- Analog I/O: 1 single ended input (0-5V)
- 5V supply output: 150mA
- Dynamic braking/chopper resistor support

### Environment Ratings

- Storage: -40°C to 85°C
- Operating temperature: -30°C to 55°C
- Withstands 95% relative humidity (non-condensing)

### Agency Approvals

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

### Safety Features

- Safe torque off (STO) - Pld Sil 3
- Reverse polarity protection
- Internal thermal protection
- External thermocouple connection

### Operating Modes

- Profile velocity mode
- Profile position mode
- Velocity current control mode
- Homing mode

### Dimensions and Weight

- Length: 40 mm
- Width: 55 mm
- Height: 38 mm (with interface board)

### Programming and Indicators

- Power indicator - red
- Status indicator - green