Performax Series
Compact USB 2.0 Motion/IO Controllers

BENEFITS
- Plug & Play with USB 2.0
- Modular and flexible
- Wide range of choices from motion, DIO, AIO to stepper drivers
- Cost effective
- Small size of 1.65”x1.65”x1.0”

Performax-CX
Stepper Controller
- 400K pulses/sec max speed
- Trapezoidal accel/decel
- Open-collector pulse/dir outputs
- Opto-isolated +L/-L/H inputs

Performax-CD
Stepper Controller/Driver
- Integrated bipolar stepper driver/controller
- +24VDC max voltage supply
- Software configurable current up to 2.5A
- Software selectable micro-step up to eighth
- Opto-isolated +L/-L/H inputs

Performax-EX
Advanced Stepper Controller
- 6M pulses/sec max speed
- S-curve accel/decel
- Open-collector pulse/dir outputs
- Opto-isolated +L/-L/H inputs
- High speed position latch input
- Differential/single-ended encoder input

Performax-DIO
Digital Input/Output Controller
- 8 opto-isolated inputs
- 8 opto-isolated outputs
- Outputs capable of driving up to 150mA

Performax-AIO
Analog Input/Output Controller
- 8 analog inputs 12 bit resolution 0-5V range
- 2 analog outputs 8 bit resolution 0-5V range

Performax-DU
Micro-stepping
Unipolar Stepper Driver
- Unipolar stepper motor driver
- +24VDC max voltage
- Selectable micro-stepping up to sixteenth
- Pulse/dir/enable opto-isolated inputs
- Current up to 3.0A

Product Summary Chart

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<th>Bipolar Driver</th>
<th>Unipolar Driver</th>
<th>Digital IO</th>
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<th>Motor</th>
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**Performax-DB**
Micro-stepping
Bipolar Stepper Driver
- Bipolar stepper motor driver
- +24VDC max voltage
- Selectable micro-stepping up to eighth
- Pulse/dir/enable opto-isolated inputs
- Current up to 2.5A

**Performax-MCD**
Integrated Stepper Motor/Controller/Driver
- Integrated motor/controller/driver
- All features of Performax CD
- Available in NEMA 17 or 23 motors with single/double/triple stack
- Available in 1.8 degree and 0.9 degree motors

**Performax-MDU**
Integrated Unipolar Stepper Motor/Driver
- Integrated unipolar motor/driver
- All features of Performax DU
- Available in NEMA 17 or 23 motors with single/double/triple stack
- Available in 1.8 degree and 0.9 degree motors

**Performax-MDB**
Integrated Bipolar Stepper Motor/Driver
- Integrated bipolar motor/driver
- All features of Performax DB
- Available in NEMA 17 or 23 motors with single/double/triple stack
- Available in 1.8 degree and 0.9 degree motors

**Typical Setup**

![Typical Setup Diagram](image)

**Dimensions**

![Dimensions Diagram](image)

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