The Motion Coordinator system is extremely modular, allowing the user to tailor the controller to their specific applications, this also allows the flexibility to incorporate new modules if the need should change, making the system “future proof”. Systems may be used with a stand alone program or alternatively commands can be sent from an external computer.

All Motion Coordinators, whether panel mount, rack mount, DIN-rail mount or a custom design format, allow digital or analogue I/O expansion with Trio’s I/O modules. Special I/O requirements can also be accommodated using the CANopen protocol to control third party I/O modules. The Flexslice System offers fast high performance EtherCAT devices for Trio’s range of EtherCAT Motion Coordinators.

Trio’s UNIPLAY range of operator interfaces provide a robust and functional HMI using the Ethernet network. Third party HMI products, touchscreens, etc. can communicate to the Motion Coordinator via the Modbus-RTU serial protocol.

System Set-Up

The MC4/5/6 range includes advanced networking technology for connection to Digital Servos, CANbus and Factory Networks. Access to all parts of the system by network connections allows reduced down-time with automated fault reporting and analysis.

With a MC664 Motion Coordinator, it is possible to control a machine with up to 128 axes (64 stepper/servo and 64 virtual), 1024 digital inputs, 1024 digital outputs, 32 analogue inputs and 16 analogue outputs.

Preliminary specifications may change without notice
Trio Motion Technology’s range of digital and analogue input/output expansion modules are designed to enable simple and scalable and low-cost I/O extension for Trio’s Motion Coordinators. In addition to 24V input, output and bi-directional modules, there are relay and analogue I/O modules.

CANbus is used for communication and control between the Motion Coordinator and the CAN I/O modules. CANbus is a tried and tested, well known data link in industry which is reliable, noise immune and flexible. All CAN I/O modules are compatible with any Motion Coordinator that has a CANbus port.

As well as being able to connect to any Motion Coordinator using Trio’s own high speed CANbus protocol, each CAN module can run the DS401 CANopen protocol allowing them to be used with other CANopen masters. Protocol selection is by DIP switches on the front of the module.

When using the TrioCANbus protocol, a Motion Coordinator can handle up to 16 Digital Input modules and 16 Digital Output modules, a total of 32 Digital modules and 4 Analogue modules. The CAN 16 I/O module counts as one Input and one Output module.

**P317: CAN 16-OUT DIGITAL**

The Trio CAN 16 Output modules can provide up to 256 distributed output channels at 24Vdc level.

- **Outputs**: 16 x 24V sourcing (PNP) output channels
- **Configuration**: 2 x 8 output channels
- **Output Capacity**: 1A per bank of 8, 250mA/channel
- **Network Speed**: 500KBit/s
- **Protocols**: TrioCAN I/O / CANopen DS401
- **Compliance**: RoHS, CE and UL

**P318: CAN 16-IN DIGITAL**

The Trio CAN 16 Input modules can provide up to 256 distributed input channels at 24Vdc level.

- **Inputs**: 16 x 24V sourcing (PNP) input channels
- **Configuration**: 2 x 8 input channels
- **Network Speed**: 500KBit/s
- **Protocols**: TrioCAN I/O / CANopen DS401
- **Compliance**: RoHS, CE and UL

**P319: CAN 16-IN / OUT DIGITAL**

The Trio CAN 16 Input / Output modules can provide up to 256 distributed bi-directional I/O channels at 24Vdc level.

- **Inputs**: 16 x 24V Input channels with 2500V isolation
- **Outputs**: 16 x 24V sourcing (PNP) output channels
- **Configuration**: 2 x 8 bi-directional input/output channels
- **Output Capacity**: 1A per bank of 8, 250mA/channel
- **Network Speed**: 500KBit/s
- **Protocols**: TrioCAN I/O / CANopen DS401
- **Compliance**: RoHS, CE and UL
### P326: CAN 8-IN/4-OUT ANALOGUE I/O

The Trio CAN Analogue I/O modules can provide up to 32 analogue input and 16 output channels.

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 x ± 10V inputs with isolation from CANbus</td>
<td>4 x + 10V outputs with isolation from CANbus</td>
</tr>
<tr>
<td>Network Speed</td>
<td>500KBit/s</td>
</tr>
<tr>
<td>Protocols</td>
<td>TrioCAN I/O / CANopen DS401</td>
</tr>
<tr>
<td>Compliance</td>
<td>RoHS, CE and UL</td>
</tr>
</tbody>
</table>

### P327: CAN 8-RELAY OUT

The Trio CAN 8 Relay modules can provide 128 distributed low power relay channels per Motion Coordinator.

<table>
<thead>
<tr>
<th>Outputs</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 x relays 30Vdc / 49V ac</td>
<td>4 x NO+NC contacts and 4 x NO only contacts</td>
</tr>
<tr>
<td>Network Speed</td>
<td>500KBit/s</td>
</tr>
<tr>
<td>Protocols</td>
<td>TrioCAN I/O / CANopen DS401</td>
</tr>
<tr>
<td>Compliance</td>
<td>RoHS, CE and UL</td>
</tr>
</tbody>
</table>

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**OVERALL DIMENSIONS**

- 154mm x 184mm x 56mm
- 186mm x 186mm x 35mm
- 226mm x 270.97mm x 40mm
- 212.97mm x 212.97mm x 34.0mm
- 120mm x 157mm x 40mm
- 170mm x 170mm x 17mm
- 170mm x 170mm x 17mm

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Preliminary specifications may change without notice.