

PRODUCTS

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.

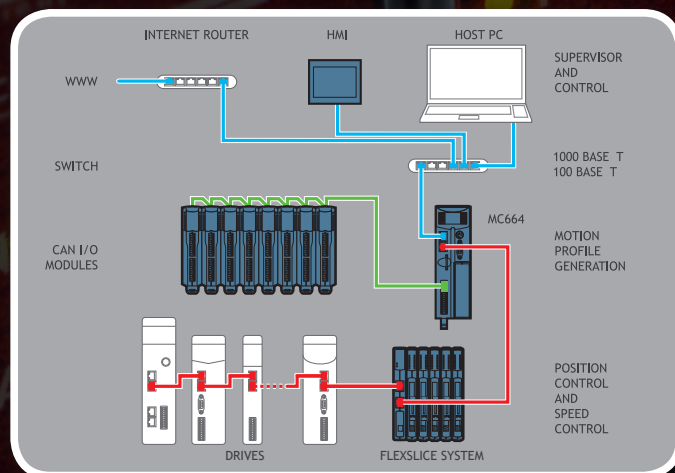
All *Motion Coordinators*, whether panel mount, rack mount, DIN-rail mount or a custom design format, allow digital or analogue I/O expansion with Trio's I/O modules. Special I/O requirements can also be accommodated using the CANopen protocol to control third party I/O modules. The Flexslice System 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.

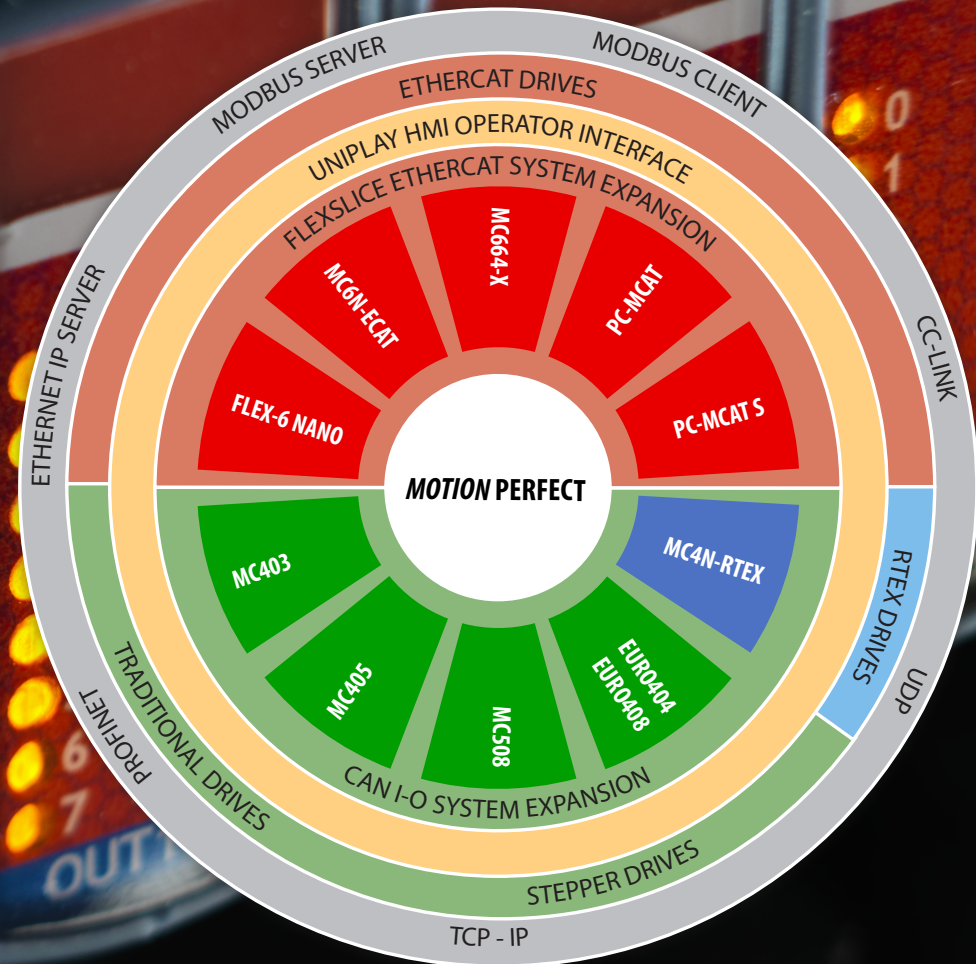
System Set-Up

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

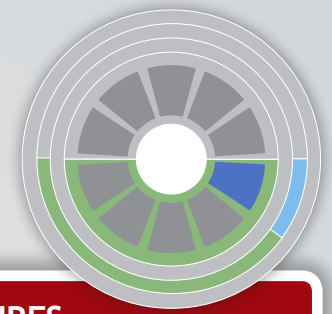


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MC4N-RTEX

RTEX Motion Coordinator



The MC4N-RTEX extends the MC4N range of *Motion Coordinators* for networked drives which started with the MC4N-ECAT. It is dedicated to running remote servo drives via Panasonic's RTEX Real Time EXpress automation bus. It is based on an up-rated version of the 532MHz ARM processor with VFP3.

The MC4N-RTEX supports up to 32 axes of motion with 64 bit integer position registers for ultra precise axis resolution. RTEX slave drives and I/O can be connected and run in cyclic synchronous position, speed or torque modes. Programming the MC4N is identical to using traditional analogue axes with the addition of being able to set up drives and process alarms over the RTEX bus. With everything programmed from one place, machine control has never been so simple.

Panasonic
RTEX
Realtime Express

FEATURES

- ★ Up to 32 RTEX Digital Drive Axes
- ★ Up to 1024 I/O
- ★ Linear, Circular, Helical and Spherical Interpolation
- ★ Flexible CAM shapes, Linked Motion
- ★ Isolated Encoder Port
- ★ EnDAT and SSI Absolute Encoder Supported
- ★ Hardware Linked Output for Camera / Laser Control
- ★ Ethernet-IP / Modbus TCP / Trio ActiveX / Uniplay HMI / UDP / Ethernet Interface Built-In
- ★ Precise 64Bit Motion Calculations with 532MHz ARM 11 Processor
- ★ IEC 61131-3 Programming
- ★ Multi-tasking BASIC Programming
- ★ Text File Handling
- ★ Robotic Transformations
- ★ 4 High Speed Registration Inputs
- ★ Isolated RS232 and RS485 ports
- ★ SD Memory Card Slot
- ★ CANopen I/O Expansion
- ★ Backlit LCD Display
- ★ RoHS, UL and CE Approved

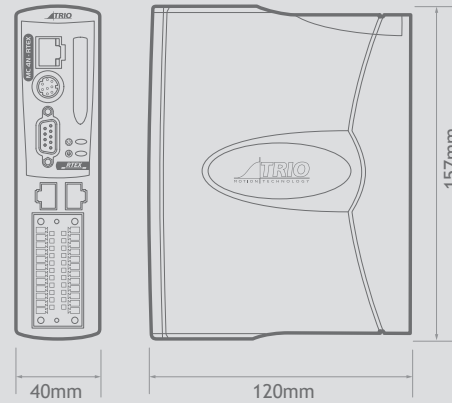
The built-in Ethernet port allows programming and connection of common PLC and HMI protocols, including the Trio UNIPLAY range of HMIs, directly to the MC4N. User programs can be written in Trio's established multi-tasking TrioBASIC language using the powerful *Motion Perfect v4* application development software making complex motion easy. The industry standard IEC 61131-3 languages are available as an option, allowing a fully functional PLC programming system.

Versions of the MC4N are available for 2, 4, 8, 16 and 32 motor axes. All versions feature 32 software axes any of which may be used as virtual axes if not assigned to RTEX hardware. Every axis can be programmed to move using linear, circular or helical or spherical interpolation, electronic cams, linked axes and gearboxes. The power of the controller allows for multiple robotic transformations to run simultaneously.

A bright easy to read backlit display enables the controller status to be easily determined, whilst the single piece metal cast backplate provides an integrated earth chassis to improve noise rejection in the industrial environment.



OVERALL DIMENSIONS:



ACCESSORIES:

- | | |
|-------------|------------------------|
| P317 - P327 | CAN I/O Modules |
| P750 | Kinematic Runtime FEC |
| P843 - P844 | UNIPLAY 7" & 10" HMI's |

PRODUCT CODES:

- | | |
|------|-------------------|
| P906 | MC4N-RTEX 2 Axis |
| P907 | MC4N-RTEX 4 Axis |
| P908 | MC4N-RTEX 8 Axis |
| P909 | MC4N-RTEX 16 Axis |
| P910 | MC4N-RTEX 32 Axis |

MC4N - MINI MASTER RANGE:

- | | |
|-----------|----------------------|
| MC4N-RTEX | Mini RTEX Master |
| MC4N-ECAT | Mini EtherCAT Master |

