MC403 / MC403-Z

TRIO
MOTION TECHNOLOGY

2 ANALOGUE INPUTS AND 2 VOLTAGE OUTPUT AND WDOG RELAY

8 DIGITAL INPUTS INCLUDING 6 X REGISTRATION INPUTS AND 4 BI-DIRECTIONAL I/O

STATUS LEDS

CAN PORT FOR TRIOCAN I/O, DEVICENET SLAVE, CANOPEN OR USER PROGRAMMABLE

PANEL MOUNT OR DIN RAIL MOUNT

3 FLEXIBLE AXIS CONNECTIONS

MICRO SD CARD

ETHERNET PROGRAMMING, MODBUS-TCP, ETHERNET IP, TRIO ACTIVEX, UNIPLAY HMI
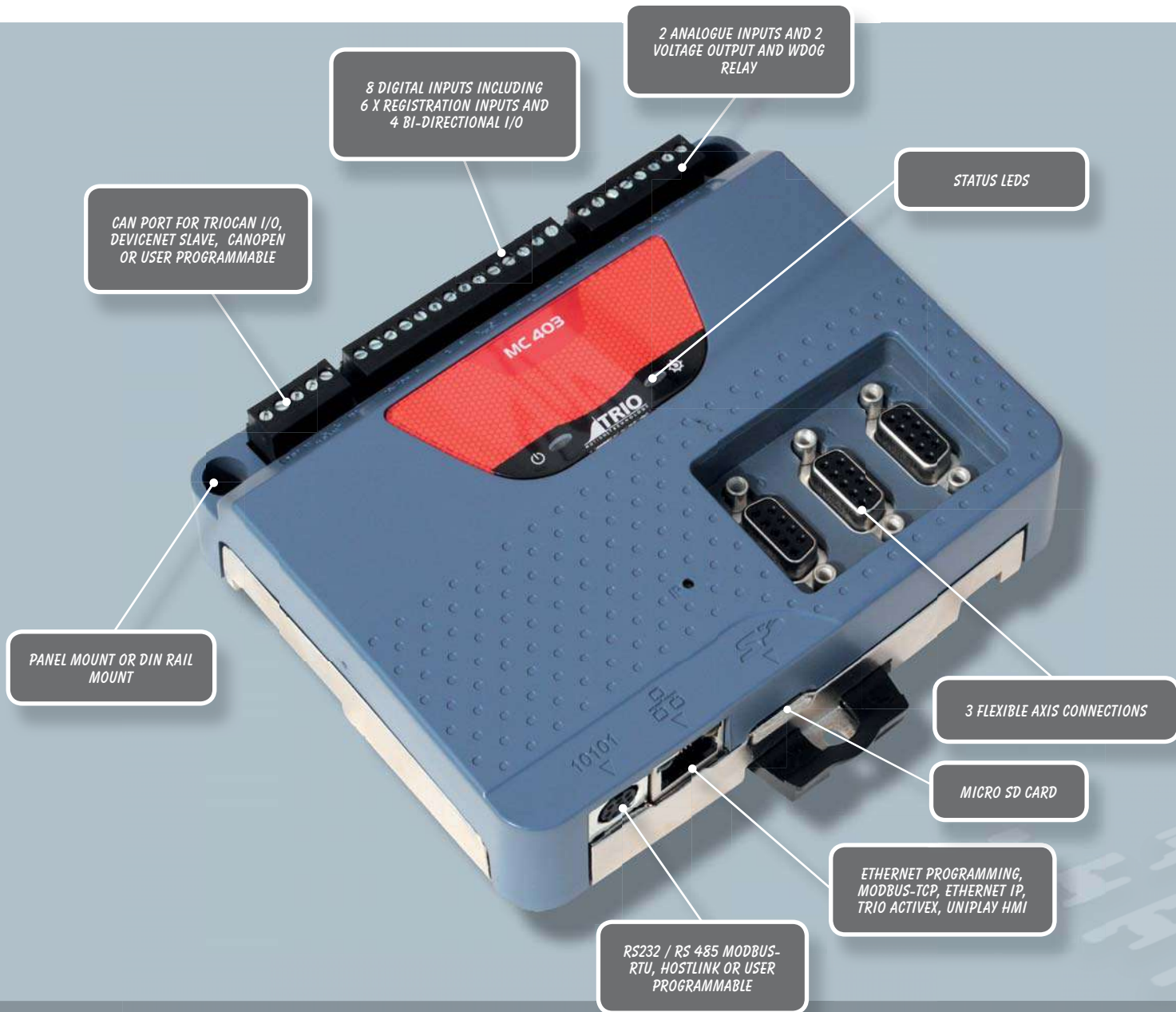
RS232 / RS 485 MODBUS-RTU, HOSTLINK OR USER PROGRAMMABLE

FEATURES

* Advanced 2 Axis Closed Loop Servo / 3 Axis Pulse Direction
* Linear, Circular, Helical and Spherical Interpolation
* Flexible CAM shapes, Linked Motion
* EnDAT and SSI Absolute Encoder Supported
* Hardware Linked Outputs for Camera / Laser Control
* Ethernet-IP / Modbus TCP / Ethernet Interface Built-In
* 125 – 2000μsec Selectable Servo Update
* Precise 64 bit Motion Calculations on ARM11 Processor with VFP
* EC 61131-3 Programming
* Multi-tasking BASIC Programming
* Text File Handling
* Robotic Transformations
* Micro SD Memory Card Slot
* CANopen I/O Expansion
* RoHS, UL and CE Approved

The MC403 is a high specification *Motion Coordinator* using a high performance ARM11 processor, with three flexible axis ports and two Voltage outputs.

The flexible axis ports can be configured in software as feedback devices or pulse direction outputs. As outputs they can be used as pulse and direction with stepper or servo drives or they can operate as a simulated encoder output. When configured as feedback they can be either incremental encoder input or one of three popular absolute encoder types; SSI, Tamagawa or Endat. Any feedback axis with a Voltage output can be used to form a closed loop servo.

The built-in Ethernet port allows programming and connection of common HMI and PLC protocols directly to the MC403. User programs can be written in Trio's established multi-tasking TrioBASIC language using the powerful *Motion* Perfect v3 application development software making complex motion easy. Also available as an option are the industry standard IEC 61131-3 languages allowing a fully functional PLC programming system.
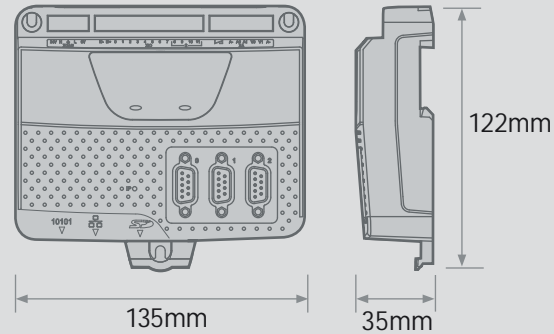
The MC403 is available in 2 model formats offering 5 different axis configurations. The entry level MC403-Z does not have a built-in DAC. All models feature a total of 8 axes in software. Any axes not assigned to built-in hardware can be used as a virtual axis. Every axis can be programmed to move using linear, circular, helical or spherical interpolation, electronic cams, linked axes and gearboxes.

Two LED's enable 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.

ACCESSORIES:

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

OVERALL DIMENSIONS:

122mm

135mm

35mm

MC403-Z PRODUCT OPTIONS			MC403 PRODUCT OPTIONS		
	P821	P822	P825	P823	P824
Axis 0	Core	Core	Extended + AS	Core	Extended + AS
Axis 1	Core	Core		Core	Extended + AS
Axis 2		Extended	Core	Core	Extended

CORE AXES – can be configured in software as pulse and direction outputs to stepper or servo drives. They can also be configured for incremental encoder feedback or simulated encoder output.

EXTENDED AXES – in addition to the Core functionality these axes can also be configured for SSI, Tamagawa or EnDat absolute encoders.

AS - Analogue 'closed loop' Servo using built-in ±10V analogue output.