

## SMC Motion Controller

The SMC motion controller uses the most advanced technology in motion control. This controller is intended for controlling machines of 1, 2 or 3 axis with stepper and/or servo control.

The onboard HMI, digital inputs, outputs, ADC, serial port and USB, supported by ready to use software with advanced motion control makes this controller, the best and most cost effective solution for machine manufacturers and system integrators.



### Advantages

- ⊙ PLC, HMI and motion controller included
- ⊙ All in one machine controller increases reliability and simplifies wiring
- ⊙ Fast set-up time
- ⊙ Custom options for OEM's
- ⊙ Smooth, fast and accurate positioning
- ⊙ Flexible IO with expansion facilities
- ⊙ Powerful, reliable and cost effective controller optimised for industrial use
- ⊙ Less wiring decreasing manufacturing costs
- ⊙ Simple to use graphic interface
- ⊙ Rugged industrial design

### Control Features

- ⊙ 3 stepper axis and 2 servo axis (max of 3 axis)
- ⊙ Linear Interpolation
- ⊙ Circular Interpolation
- ⊙ 16 digital Inputs and 16 Outputs
- ⊙ 8 Analogue inputs
- ⊙ Fast registration with synchronisation features
- ⊙ Dedicated high speed encoder inputs
- ⊙ Tactile tough overlay to protect from oil, dirt and swarf
- ⊙ Bright TFT LCD with 5.7" screen and 65,536 colours
- ⊙ Supports USB

# Programming Options

## MAP

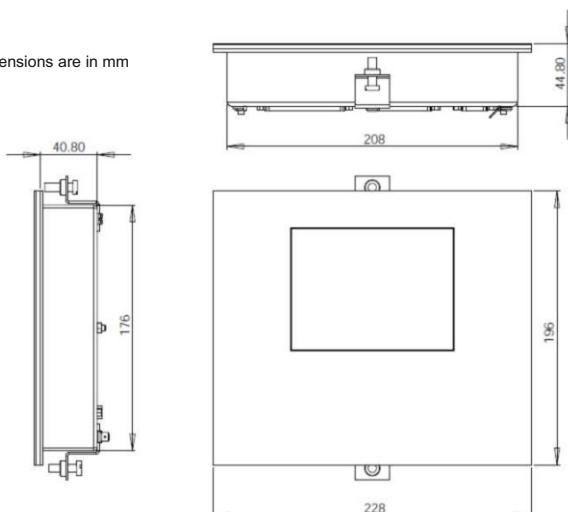
Motion Application Program (MAP) is a user friendly application, that makes the task of writing user programs simple. Map is intuitive and requires a minimal programming knowledge. MAP programs can be very basic through to complex and the language has a rich set of commands, therefore accurate movements, I/O tasks, timing and other PLC functions are supported. Map has excellent support for tasks involving motion control and maths.

MAP has easy to navigate pull down menus that assists the user in implementing commands. Users can save program data directly to the controller's memory or to an external USB device.

MAP supports up to 1000 lines of command space, that means that it is possible to have a large number of commands for the more complex operations. The SMC controller has an internal memory that can store, on average 12,800 MAP files.

## Dimensions

\*All dimensions are in mm



## MAP Script

MAP script is a very intuitive language that facilitates the use of images, text, tables, buttons, true type fonts etc.

The script was designed with simplicity in mind, which is therefore made easy, in a way that anyone with minimal knowledge of programming, will be able to program.

## G-Code

MAP supports a command which allows the implementation of G-Code.

G-Code is a text format that holds a list of alphanumeric codes that perform actions, such as:

- ⦿ Rapid , Linear & Circular Moves
- ⦿ Set tool information, such as offset
- ⦿ Controlled feed rate in a straight line or arc

## C Language

Create powerful applications with C language when customisation of software is required.

It was designed to be compiled using a relatively straight forward compiler, to provide low-level access to memory. This means that the user can do such things as:

- ⦿ Design and create screens
- ⦿ Modify screen colours and logo
- ⦿ Complete customised application

## Ready to use graphic interface with MAP

