

# The M221 Logic Controller

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## M221 Logic Controllers

The M221 Logic Controller is a small, low-cost controller for simple machine applications. AM221 Logic Controllers are powered by either 24VDC or 100-240VAV and have a modular design allowing the addition of further analog, digital and specialised I/O.



They are fitted with one or two RJ45 connector serial ports and a USB port for application transfer.

A SD card slot is located under the central cover to allow data transfers and firmware update via SD card.

Information and diagnostic LEDs are also fitted on the front panel.

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## Common Components

There are several common options or components that are present on all M221 Logic Controllers.

- Serial Port for data transfer
- USB connector for programming
- 2 independent 0-10V Analog Inputs
- SD Card slot for data transfer
- LED Information display
- On-board I/O
- High speed counter inputs
- I/O Expansion

The internal workings of all M221 Logic Controller are also basically the same with just a few different components for the options. This means that the performance will be the same across the entire M221 product range.

## The M221 Logic Controller (cont.)

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### Optional Components

There are a number of options for the M221 Logic Controller.

- A range of input and output combinations
- 0.1A transistor outputs or 2A relay outputs
- Ethernet connection for programming and data transfer
- Removable terminal block or HE10 connector
- Screw or spring connectors for the removable terminal blocks
- Pulse generator to provide pulsed or Pulse Width Modulation (PWM) control

Some are exclusive, for example the 16 input/16 output units can only be supplied with transistor outputs.

For a full list of available units and options, see *Chapter 2 - M221 Hardware*.

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### I/O Expansion

The M221 comes with some I/O built-in but this may not be enough to meet the needs of the application.

If more I/O is required, expansion modules can be added to the M221 Logic Controller to provide more I/O. These expansion modules can be either the existing TM2 modules or a new range of TM3 modules. Modules can be either digital or analog and provide additional inputs, outputs or a combination of both.

Compatibility with the TM2 range of I/O means that it is very easy to replace a Twido with a M221 Logic Controller.