MIAC

MIAC controllers provide learners and developers with a high power, flexible electronic system in a rugged industrial standard case that sits on a standard 25mm 'top hat' DIN rail.

MIACs are electrically and physically compatible with a huge range of industrial accessories and expansion modules: from sensors to powerful motor controllers. MIAC controllers are based on a number of different microcontroller platforms (PICmicro, Arduino, Raspberry Pi) and can be programmed with a range of development tools.

There are now 5 differnet models of MIAC: PIC, dsPIC, AVR/Arduino, Raspberry Pi and AllCode. The choice you make will depend on the software tools you want to use and your application.

The range of inputs and outputs of the MIAC are well specified with analogue/digital inputs, motor control outputs, internal relays, and a number of communications interfaces including CAN, RS232, and RS485. Optional Bluetooth and Wi-Fi interfaces make MIAC perfect for Internet Of Things applications.

MIAC is fully compatible with our own Flowcode software (PIC, Arduino, dsPIC) and a full simulation of MIAC is available within Flowcode.

An educational version of the basic PIC MIAC with rugged plastic case and 4mm connectors is available.

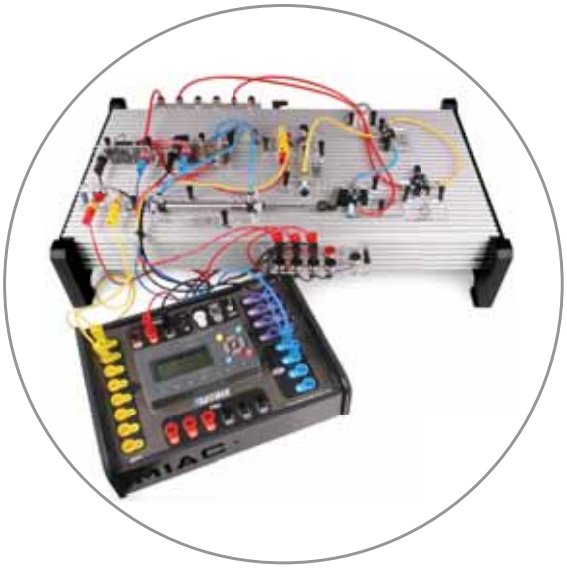
MIAC is now available in 5 models:

- PIC
- AVR/Arduino
- dsPIC
- Raspberry Pi
- AllCode

For an explanation of icons please see page 6

MIACs have a wide range of uses:

MIACs used to control a mid scale hydroelectric power station in Sri Lanka.



Educational version of the MIAC used in a Pneumatics training rig.

Features				
PIC	**Arduino**	**dsPIC**	**RPi**	**AllCode**
				
Processor				
8 bit, PIC18F	8bit AVR/Arduino	16bit dsPIC	32bit ARM/RPi	16bit dsPIC
Processing speed				
12 MIPS	8 MIPS	70 MIPS	800MIPS	70 MIPS
Memory				
32KB ROM, 2KB RAM	128KB ROM, 8KB RAM	256KB ROM, 28KB RAM	4GB ROM, 512MB RAM	256KB ROM, 28KB RAM
Display				
4 line 16 char LCD	5 line 20 char.	5 line 20 char.	5 line 20 char.	5 line 20 char.
	Blue backlit graphical LCD	Blue backlit graphical LCD	Blue backlit graphical LCD	Blue backlit graphical LCD
Communications formats				
CAN	RS232, RS485, CAN	RS232, RS485, CAN	RS232, RS485, CAN	RS232, CAN
			Wi-fi as standard	
Comms options				
	Wi-fi or Bluetooth	Wi-fi or Bluetooth	Bluetooth	Wi-fi or Bluetooth
	(replacing RS485)	(replacing RS485)	(replacing RS485)	
Internal peripherals				
	Micro SD card slot	Micro SD card slot	Micro SD card slot	Micro SD card slot
	Real Time Clock	Real Time Clock	Real Time Clock	Real Time Clock
Inputs - all either analogue or digital				
8 x 0-12, 10 bit	8 x 0-12, 10 bit	8 x 0-12, 10 bit	8 x 0-12, 10 bit	8 x 0-12, 10 bit
Outputs				
4 x solid state (1.75A total)	4 x solid state (5.6A total)	4 x solid state (5.6A total)	4 x solid state (5.6A total)	4 x solid state (5.6A total
4 x relay (8A)	4 x relay (8A)	4 x relay (8A)	4 x relay (8A)	4 x relay (8A)
Operating voltage				
12V	9 - 24V	9 - 24V	9 - 24V	9 - 24V
Software options				
Flowcode, C, ASM	Flowcode, C, ASM	Flowcode, C, ASM	Linux based	API provides which allows control to any host system with Bluetooth or Wi-Fi
	Arduino C++ tool chain		Python, C++ etc.	
			Using remote desktop technology	
Product codes - standard version				
MI0235	MI5466	MI5809	MI5769	With Wi-fi: MI5331
	With Wi-fi: MI9335	With Wi-fi: MI8615	With Bluetooth: MI6693	With Bluetooth: MI5528
	With Bluetooth: MI3449	With Bluetooth: MI8759		
Product codes - education version with 4mm connectors				
MI0245	Call us	Call us	Call us	Call us

For an explanation of icons please see page 6