



MAXIFLEX 8AI ISO Module

Model M1434D Individually Isolated 8 way High Accuracy Analogue Input Module.

DATASHEET



FEATURES

- Fits in any MAXIFLEX base I/O slot
- 8 individually isolated configurable analogue Inputs
- Full inter-channel isolation for industrial applications
- 24 bit measurement resolution for very high accuracy
- milliVolts/Volts and Currents individually selectable on each input allows mixed types and ranges.
- Four Alarm/Trip setpoints per input.
- Removable Terminal Blocks
- Hot Plug-in
- In system automatic module detection

DESCRIPTION

The M1434D 8AI ISO module provides 8 inputs that can be individually configured for millivolts/Volts or Current inputs. The inputs are individually isolated. This intelligent module is software configurable, and allows each input to be configured for a different input type and range. The input value can be scaled in the module into Engineering Units of the user's choice

Current inputs are measured using an internal 220 Ohm resistor switched in across the input terminals.

Each input has four software settable alarm/trip setpoints and a deadband value. The status of the alarm/trip signals is available as derived digital inputs from the module.

The module may be inserted into any I/O slot in a Maxiflex system.

Inputs are terminated on plug-in screw terminals.

The module can be inserted or removed while the system is powered.

Auto-detection capability allows the CPU to recognise the presence of this module in the system.

All configuration and dynamic data are made available to the system CPU through the module registers. The module is configured by writing the appropriate values to these registers, and the dynamic values are read by reading from these registers.

SPECIFICATIONS

Inputs

Quantity	8
Voltage range	-0.1000000 to 5.125000V
Current range	-0.500000 to 23.300000 mA
Input Resolution	1microVolt or 1microAmp
Input Impedance (Voltage)	1M Ω
Input Impedance (Current)	220 Ω
Linearity	0.01% of span max.
Temperature Drift	50ppm/ $^{\circ}$ C typical
ResponseTime 10-90% step	Settles to within 3% in 200ms

Isolation

Input to system logic	100% tested to 1500Vac rms (60s)
Input to Input	100% tested to 500Vac rms (60s)
Insulation resistance	>20M Ω at 500Vdc

Interference Rejection

CMRR at 50/60Hz	120dB at 250Vac rms
NMRR at 50/60Hz	50dB at 250 Vac rms

LED Indication

CPU OK	ON = operating correctly Flashing = Module failure OFF = No Power or module failure
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Output Termination

Types	Screw clamp Plug-in Terminal Blocks and 20 way ribbon header
Screw Terminal Wire Size	2.0mm ² maximum For manageable wiring to the module, 0.5 mm ² is recommended with 2mm overall outside diameter

Environmental

Operating Temperature	0 $^{\circ}$ C to +60 $^{\circ}$ C (32 $^{\circ}$ F to +140 $^{\circ}$ F)
Storage Temperature	-40 $^{\circ}$ C to +85 $^{\circ}$ C (-40 $^{\circ}$ F to +185 $^{\circ}$ F)
Humidity	5 - 95% max. at 40 $^{\circ}$ C (104 $^{\circ}$ F) non-condensing.
Protection	Electronics conformally coated

Logic Power Consumption

From Logic Power Supply	300mA max from 5Vdc
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Mass

Excluding Packaging	420g (14.7oz)
Including Packaging	505g (17.8oz)

Ordering Information

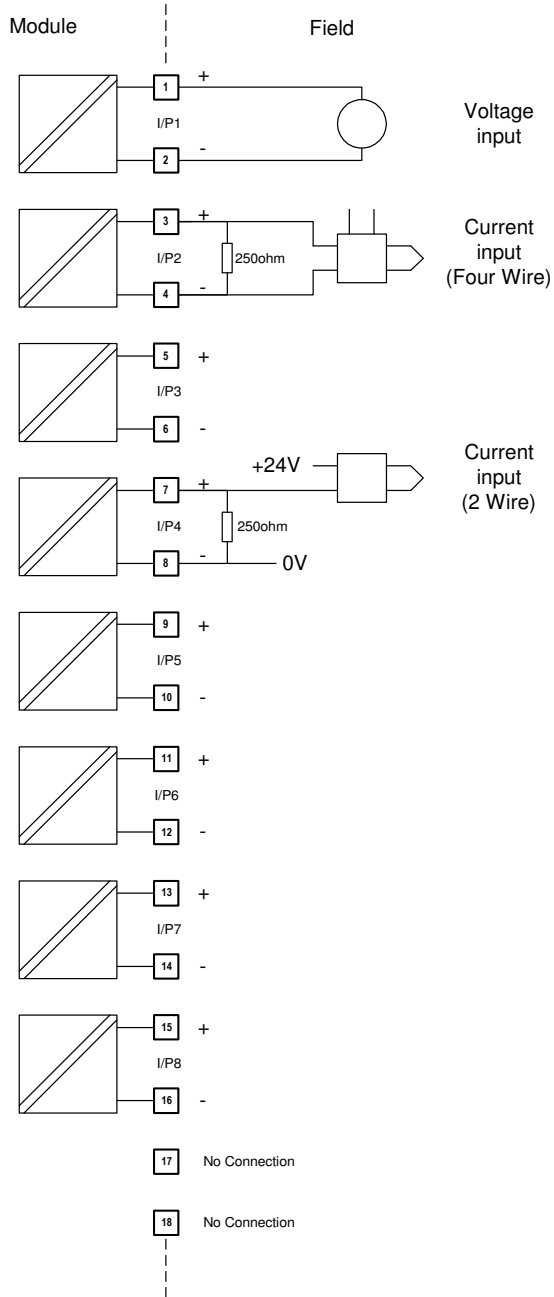
Description	Order Code
Maxiflex 8AI ISO Module	M1434D



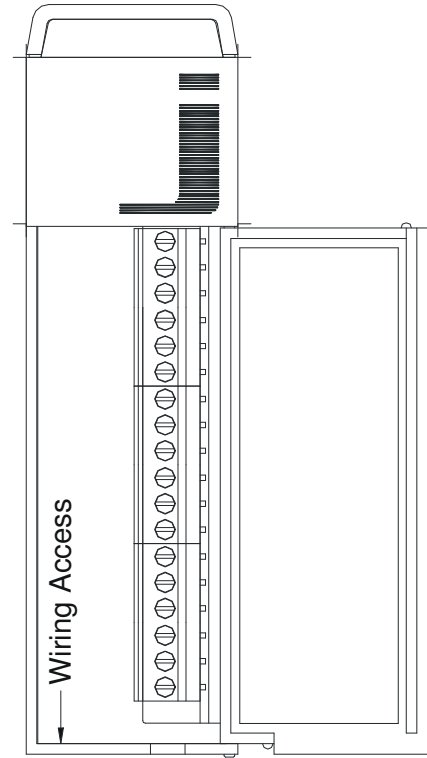
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ELECTRICAL CONNECTION



MECHANICAL CONFIGURATION



Note: Module shown with door open.