FEATURES

- **Fits in any MAXIFLEX base I/O slot**

- **4 individually Isolated 4-wire Resistance Bulb Inputs**

- **High isolation voltage rating for industrial applications**

- **Intelligent Module provides direct conversion to Temperature.**

- **Four alarm set-points per input**

- **Rate of Change Alarm or Setpoint Alarms**

- **Removable Terminal Blocks**

- **Hot Plug-in**

- **In system automatic module detection**

The M1436A 4RTD module provides 4 resistance temperature detector inputs. The inputs are individually galvanically isolated. This intelligent module is software configurable, and allows each input to be configured for a different input type and range.

The module will convert the RTD resistance reading directly into degrees C or F to a resolution of 0.01 degrees.

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.

In addition, Rate of Change (ROC) alarms per input are supported.

High inter-channel galvanic isolation allows inputs to be exposed to high common mode voltages without detrimental effect.

With the aid of accurate reference resistors and the calibration software, the module can be field calibrated by the user if required.

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.

SPECIFICATIONS

Inputs

Quantity	4 isolated inputs Individually configurable for range
Type	4-wire measurement Pt100: −115°C to 327°C
Excitation	0.415mA constant current
RTD power at max input	34μW
Resolution	0.01°C
Maximum RTD resistance	230 Ohm
Maximum Temperature	350°C (with Pt100)
Output Reading	Direct temperature in °C or °F (software configurable)
Amplifier Drift	30ppm/°C typical
Linearisation Technique	Software breakpoint with linear interpolation
Accuracy	0.1°C

Response Time

Step Input 10% to 90%	Reading settles to within 3% in 200ms maximum on all inputs.

Isolation

Inputs to System Logic	1500Vac rms
Input to Input	500Vac rms

Insulation Resistance

Input to system logic	>20Mohms at 500Vdc

Interference Rejection

CMRR @ 50Hz	No effect up to 400Vac rms
NMRR @ 50Hz	50dB

LED Indication

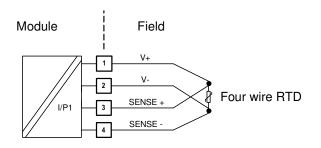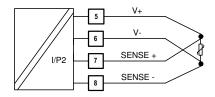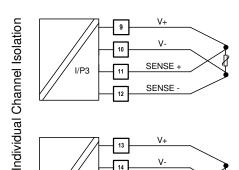|	
CPU OK	ON = operating correctly Flashing = Module failure OFF = No Power or module failure

http://www.omniflex.com

Omniflex ®

Output Termination

Types	Screw Clamp Plug-in Terminal Blocks
Screw Terminal Wire Size	2.0mm^2 maximum 0.5 mm^2 is recommended with 2mm overall outside diameter

Environmental

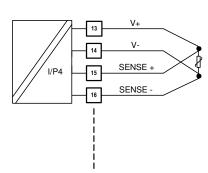|	
Operating Temperature	0°C to +60°C (32°F to +140°F)
Storage Temperature	-40°C to +85°C (-40°F to +185°F)
Humidity	5% to 95% 40°C (104°F) non-condensing.
Protection	Electronics conformally coated

Logic Power Consumption

From Logic Power Supply	300mA maximum from 5Vdc

Auto Identification Codes

Module ID	49
Scan Code	41

Mass

Excluding Packaging	419g (14.8oz)
Including Packaging	505g (17.8oz)

Ordering Information

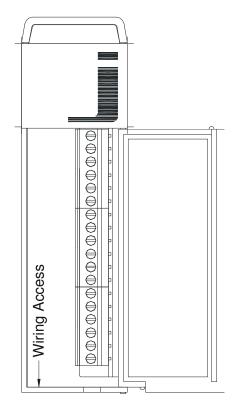| Description	Order Code
Maxiflex 6RTD module	M1436A

ELECTRICAL CONNECTION

MECHANICAL CONFIGURATION

Note: Module shown with door open.

http://www.omniflex.com

Omniflex ®