



M-1000

Features

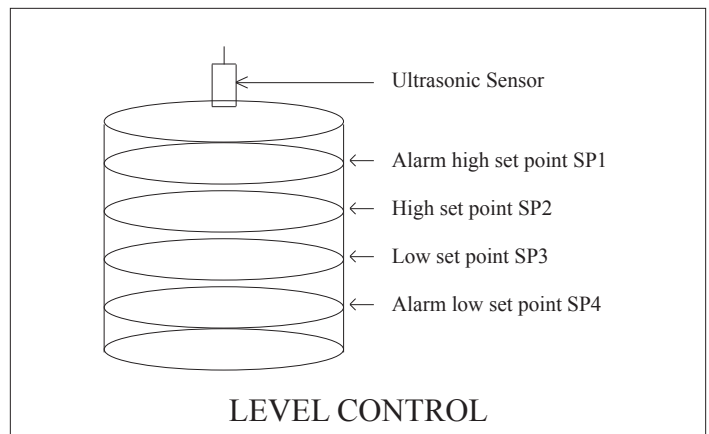
- Analog Input
- Dual Sensor Control
- Temperature Compensation
- Communication Port RS485
- Thickness Measuring
- Sealed Front Panel Nema 4
- Program Lock Access Code
- Enclosure 1/8 DIN
- Scaling of Display
- Power Supply 110mA @ 24VDC

The M-1000 analog controller is a multipurpose dual sensor controller with a wide range of uses in the process control field. It was designed to work with any of Migatron's analog output sensors as well as a temperature probe for temperature compensation. Its easy program modes allow instruction entry and review of previously programmed values. It accepts a standard 0 - 20mA, 4 - 20mA, 0 - 5V, 2 - 10V, 0 - 10V analog input. The microcontroller digitally scales the inputs with near and far scaling points, then this information is displayed on a 4-1/2 digit digital display. This attribute is also contained in an optional second channel input for added expandability. The controller can also supply 24VDC up to 110mA to the sensors. The outputs consist of four solid state relays for use as outside limit monitors. These outputs can be programmed as either normally open or normally closed and can switch 2 - 130VAC or VDC 50mAAC or 100mADC continuous. An RS485 serial communications port is also supplied. Communication can take place for baud rates of 300, 1200, 2400, 4800, and 9600. Each controller can be configured to transmit standard ASCII code up to a maximum distance of 10,000 feet. The M-1000 samples its inputs at a rate of 25 times per second, and includes auto zeroing. Its analog to digital converter is accurate to +/- 0.05mV and its converter is also rated as having a drift rating of 50ppm per degree Celsius. The M-1000 is powered by 120VAC @ 8W, and all of the inputs and outputs are tightly secured with reliable screw clamp cable connectors.

The M-1000 controller provides 4 individual set points with independent relay outputs that can be programmed either N.O. or N.C. The most common ap-



plication for this unit is in level control. Using the Mode Selector along with the Up and Down Cursors, a High set point (SP2) and Low set point (SP3) can be set to keep a level in and between a specific window. Then, using the same function keys, an Alarm High (SP1) and an Alarm Low (SP4) set point can be set to prevent the level from getting dangerously high or low. During this operation the M-1000 is also providing the user with a continuous position update of the level by means of its digital display. This display can be scaled to read out in many different units such as inches, centimeters, gallons, etc.



Specifications:

Power Input: 120VAC
Optional 220VAC

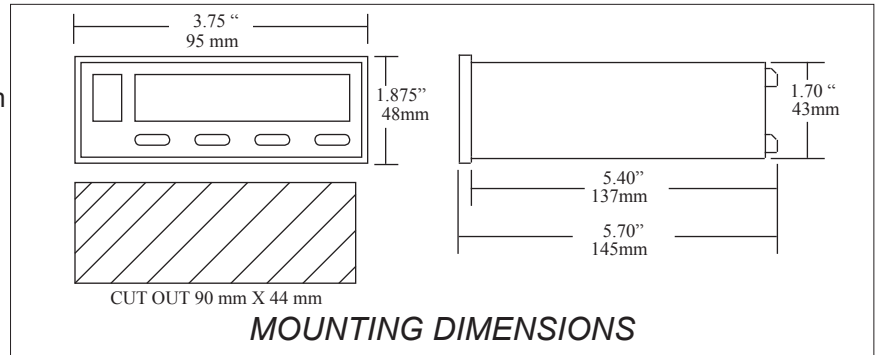
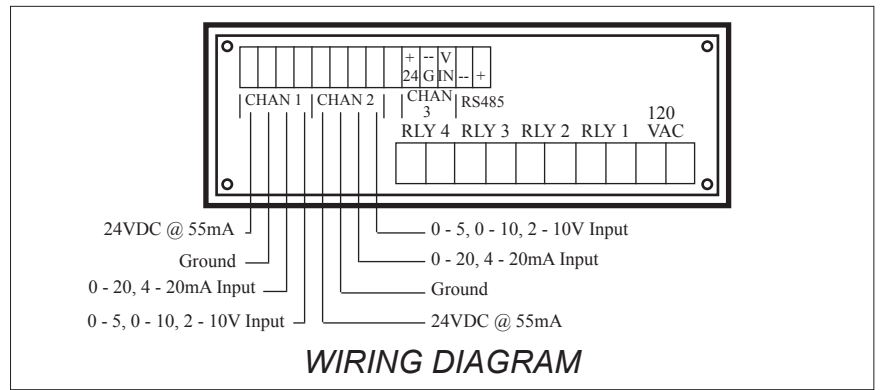
Input Power: 8W, Typical

Excitation Power: 24VDC @ 110mA
Total for all Channels

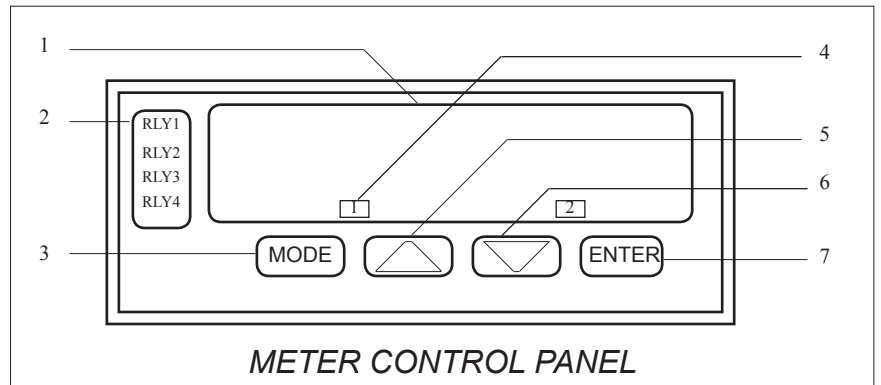
Input Impedance:
Analog Voltage Input 250k Ohms
Analog Current Input 100 Ohms

Outputs: 4 Solid State Relays
N.O. or N.C., Programmable
1500VRMS Isolation
2 - 130VAC or VDC
50mAAC or 100mADC, Maximum
Short Circuit Protected

Weight: 16 ounces



- 1) 4-1/2 Digit Display, used to display the data to the user, and to display the set values while programing.
- 2) Relay Indicator LEDs, to indicate which outputs are on, and flicker when in the program state.
- 3) Program Mode selector when pressed displays program choices.
- 4) LED. Indicators for channel 1 and channel 2.
- 5) Up Cursor increases numerical value.
- 6) Down Cursor decreases numerical value.
- 7) Enter button saves program choices into memory.



PART NUMBER	RANGE	DESCRIPTION
M-1000 M-1000 220VAC		120VAC Version 220VAC Version
TA-5		Temperature Sensor



Phone: (815) 338-5800 / Fax: (815) 338-5803

935 Dieckman St., Woodstock, IL 60098, U.S.A.
web: www.migatron.com / e-mail: info@migatron.com