

MICRO-C DISPLAY



Micro-C Displays – Compatible with UniMeasure Digital Transducers!

The Micro-C digital panel meter may be used with UniMeasure digital position transducers for the measurement of linear position or velocity. The microprocessor based Micro C features easy front panel programming, terminal strip detachable connectors on the rear face and a wide range of options to allow an exact configuration for the application. With the Quadrature Signal Conditioner, the Micro C is capable of receiving quadrature inputs from UniMeasure transducers with either standard 5 VDC TTL output or optional 5 VDC differential output. Transducer electrical power is received from the meter. With simple jumper connections, counting mode may be set at X1, X2 or X4 to increase resolution accordingly. The meter may be scaled by using an offset and scale factor derived from the calibration constant supplied with UniMeasure transducers or scaling may be done using the two point method to give an output directly in engineering units. With the extended version, MCRE, the Micro C can be configured to read rate from the pulse signal of UniMeasure digital transducers. Rate counting is possible in X1, X2 or X4 counting mode. The rate may be programmed to read in engineering units. The Micro-C display has two alarm indicators with setpoints that may be programmed from the front panel pushbuttons. Optional open collector transistors or dual 10 amp relays allow outputs to be set above or below the setpoint in a latched or non-latching mode. Time delays of the outputs are digitally selectable. 0 to 10 V or 0 to 20 mA (4 to 20 mA) analog outputs are available to drive chart recorders or for transmission to a central control unit. Adding RS-232 or RS-485 enables the displays to communicate with PLC's or computers. Software provided with these options allow programming the meter from a host computer.

SPECIFICATIONS

DISPLAY

Type 6 LED, 7-segment, 14.2 mm (.56")
 high digits and 3 LED indicators
 Color Red
 Range -999,999 to +999,999

CONVERSION PERIOD

Gate Time 0 TO 199.99 sec.
 Technique (frequency) 1/Period time
 Rate Gate time + 10 ms + 2 periods of
 the input signal

ACCURACY AT 25°C

Time Base (crystal) Calibrated to ±1 Count
 V to F Converter 0.015%FS ± 1 Count
 Span Tempco ±1PPM/°C
 Long Term Drift ±5PPM/year
 CMV (DC to 60Hz) Safety rated to 250 Vac

ENVIRONMENTAL

Operating Temperature 0°C to +55°C
 Storage Temperature -40°C to +85°C
 Operating Humidity 95% at 40°C, non-condensing

SIGNAL INPUT SPECIFICATIONS, CHANNELS A & B

High Level Input Max 250 VAC
 High Level Input Min 0.25 VAC
 Low Level Input Max 50 VAC
 Low Level Input Min 0.01 VAC
 Input Coupling AC or DC
 Frequency Response 200 kHz max

EXCITATION POWER SUPPLIES

Outputs 5 VDC, 5%, 100 mA max
 10 VDC, 5%, 120 mA max
 24 VDC, 5%, 50 mA max
 Isolation (power ground) ... Safety rated to 250 VAC

OPERATING POWER

Voltage (std) 85 to 264 VAC, 90 to 370 VDC
 Voltage (opt) 8 to 28 VAC, 9 to 37 VDC
 Frequency DC and 47 to 440 Hz

MODEL NUMBER CONFIGURATION



BASIC CONFIGURATION

MCR0-HHH-Q

0	DISPLAY
MCR	Red LED (for Position)
MCRE	Red LED (for Position or Rate)
1	METER POWER
0	85 to 264 VAC, 90 to 370 VDC
1	8 to 28 VAC, 9 to 37 VDC

2	ANALOG OUTPUT
H	None
J	0 to 10 VDC
K	0 to 20 (4-20) mA DC

3	SETPOINT OUTPUT
H	None
R	Dual 8 A Relay
C	Form A 130mA Solid State Relay

4	DIGITAL INTERFACE
H	None
2	RS-232
4	RS-485
B	Parallel BCD

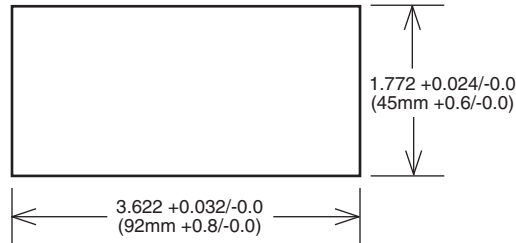
5	SIGNAL CONDITIONERS
Q	Quadrature

DIMENSIONAL INFORMATION

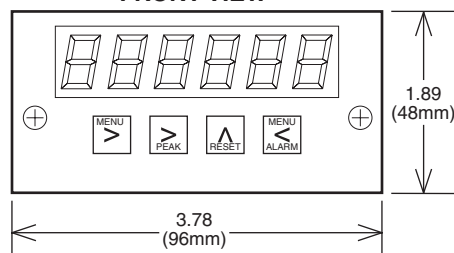
MICRO - P SERIES

MICRO - C SERIES

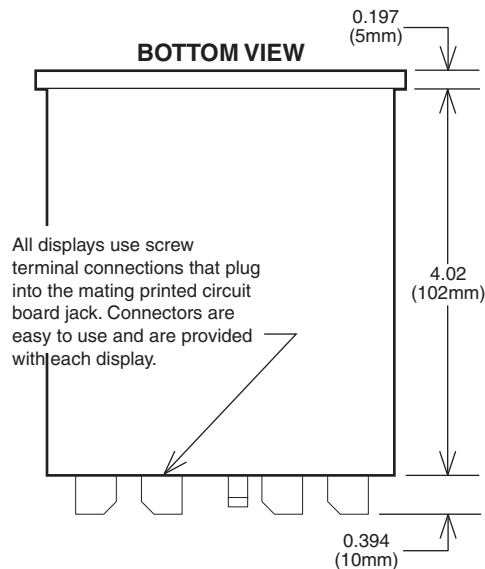
PANEL CUTOUT



FRONT VIEW



BOTTOM VIEW



All displays use screw terminal connections that plug into the mating printed circuit board jack. Connectors are easy to use and are provided with each display.