





PM-35U

Standard Range 2V 4 Optional DC Input Ranges from 200mV to 1200V

A Low Cost Easy To Use General Purpose Meter

General Features

The PM-35U Digital Panel Meter is an economical, high performance instrument incorporating a number of features usually found only on more expensive meters. Utilizing the dual slope method of integration, the unit measures differential and sinale-ended DC voltages over five user selectable ranges from 199.9mV to 1200V full scale.

Maximum resolution is 100µV over ±1999 counts. Provision is made for user connections to provide various operating modes. including a ratiometric voltmeter, current meter, ratiometric ohmmeter, and a temperature difference meter.

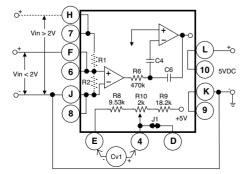
The true differential input capability of the Model PM-35U is particularly useful for making accurate measurements of very small signals in the presence of much larger common mode signals.

Because of its high noise immunity, it is also ideal for measuring various balanced transducers and bridge inputs. When measuring bridge circuits, long term drift of the excitation voltage can be compensated for by using the ratiometric voltmeter mode of operation.

Typical Application Connections

SINGLE-ENDED METER- 200mV Range, >2V Range 200mV Range: 1) Change R6 from 470k to 47k, ±5%; 2) Change R9 from 18.2k to 26.7k, ±1%; 3) Remove R8 (9.53k) and short with a jumper; 4) It is recommended that C4, C5 and C7 be changed to 0.22mF; 5) Adjust R10 until CV1=100mV.

>2V Range: Install R1 and R2 as specified under section titled Useful Tables.



View more application connections and connection instructions on page 3.

Specifications

Input Configuration:.....True differential and single-ended

Full Scale Ranges:±199.9mVDC

±1.999VDC (standard)

±19.99VDC ±199.9VDC ±1200VDC

Input Impedance:.....Exceeds $1000M\Omega$ on 200mV and

2V ranges: 10MΩ on all other

ranges

Input Protection:±250VDC or 175VAC maximum on

200mV and 2V ranges; ±1200VDC or 850VAC on all other ranges

Accuracy:±(0.1% of reading + 1 digit)

Temperature Coefficient: ..5PPM/°C in ratiometric operation; 80

to 100PPM/°C using internal reference on 200mV and 2V ranges

Warm Up Time:2 minutes to specified accuracy

Conversion Rate:.....3 readings per second nominal

Display:...............0.4" LED

Decimal Selection:User programmable to 3 positions

Overrange Indication: ... When input exceeds full scale on

any range being used, most significant "1" digit & polarity symbol are displayed with all other digits

blank

Power Requirements: ...+4.5 to +5.5VDC at 200mA max.

Operating Temperature:....0° to +60°C

Storage Temperature: ...-20° to +70°C

Relative Humidity95% (non-condensing)

Case Dimensions:Bezel 2.76" x 1.17" (69.75 x 29.7mm)

Depth behind Bezel 3.32"(84mm) plus 0.68" (17.27mm) for connector.

Weight:.....88 gms (3.1 oz)