

AM-20

Solid State Analog Meter
Twenty 0.15" LED Segments
in a Slim Bezel Case

A rugged, high accuracy LED bargraph panel meter with 20MΩ input impedance, multiple display modes, dual scaling and powered from 4V to 6VDC Bargraph mode 4V to 24VDC in Dot mode.

General Features

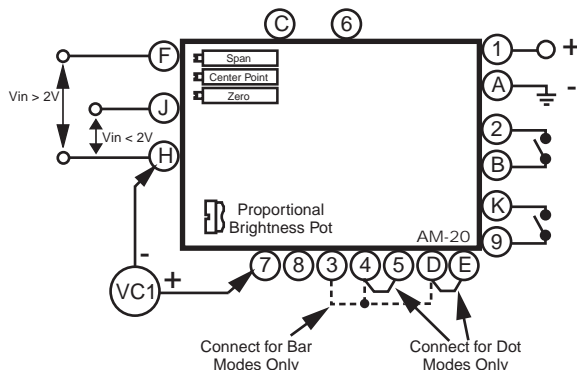
The AM-20 is a highly versatile, solid-state analog meter capable of a variety of user programmable display modes. It is designed to meet the requirement in many applications for a rugged, high input impedance meter that has instantaneous response and is immune to the vibration, sticking and overshoot problems associated with needle-type meters.

The meter's display consists of 20 LED segments individually driven by 20 comparators divided into a left side set and a right side set of ten comparators each.

The user can select and adjust the three internal reference voltages that are applied respectively, to the left side of the left comparator set, the center point where the two comparator sets are joined in series and the right side of the right comparator set. The meter's circuitry detects when the input signal corresponds to the voltage at any one of the 20 points along the two comparator divider networks with a step accuracy of better than 0.1%. The meter can be adjusted so that both comparator sets have an equal reference voltage across them which will produce a linear full scale display, or if required, they can have a different reference voltage which will enable each half of the meter's display to have a different scale or sensitivity.

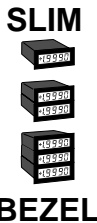
Typical Application Connections

Bar or Dot Mode Voltmeter



Compatibility

The AM-20 is shipped in a standard Slim Bezel case. The Slim Bezel case is compatible with the CM, SM, PM, & SP Series of meters. The AM-20 can be ordered in End Mount cases for twin mounting or combinations of multiple center mount cases and two end mount cases for stack mounting.



Specifications

Input Configuration:Single-ended

Input Impedance:Exceeds 20MΩ on 2V range; 10MΩ on all other ranges.

Full Scale Ranges:2VDC (Standard)
20VDC
200VDC
1200VDC (Maximum Input Signal)
All ranges except 1200VDC are field adjustable from 20% to 120% of the basic full scale range value.

A/D Converter:Flash Converter

Accuracy:±0.5% of Full Scale

Temperature Coefficient:...150PPM/°C on 2V range; 200PPM/°C on all other ranges

Warm Up Time:Instantly to specified accuracy

Conversion Rate:Instantaneous Flash Converter

Display:.....0.15" Segment height; 20 LED's

Over-range Indication:All bars flash

Power Supply:.....5V DC @ 280mA

Operating Temperature: ...-10°C to +60°C

Storage Temperature:.....-20°C to +70°C

Relative Humidity:95% 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:.....90.72 gms (3.2 oz)
136.1 gms (4.8 oz) when packed