



# AP-202A

## 3 1/2 DIGIT, DC PANEL METER

### DC Voltage Measurement

Model	Range	Input Impedance	Input Protection
AP-202A-11	±199.9mV	100M Ω	±100V
AP-202A-12	±1.999V	100M Ω	±100V
AP-202A-13	±19.99V	10M Ω	±250V
AP-202A-14	±199.9V	10M Ω	±500V

Accuracy: ±0.1% rdg ± 1 digit (23°C ±5°C)

### DC Current Measurement

Model	Range	Internal Resistance	Input Protection
AP-202A-21	±199.9μA	1K Ω	±10mA
AP-202A-22	±1.999mA	100 Ω	±50mA
AP-202A-23	±19.99mA	10 Ω	±150mA
AP-202A-24	±199.9mA	1 Ω*	±500mA
AP-202A-25	±1.999A	0.1 Ω*	±3A

Accuracy: ±0.2% rdg ± 1 digit (23°C ±5°C)  
±0.3% rdg ± 1 digit only for AP-202A-25

\* These resistors are connected to the outside of the unit.

### Specifications

**Input Configuration:** Single Ended  
**Input Bias Current:** 50PA (Typ.)  
**Conversion Rate:** 2.5/sec or 12.5/sec (50Hz), 15/sec (60Hz)  
**Normal Mode Rejection:** 40dB (Typ.) (50/60Hz)  
**Zero Stability:** Automatic Zero Adjustment  
**Display:** 3 1/2 digit, LED, 10.2mm (.40")  
**Polarity:** A "-" is displayed automatically  
**Decimal Point:** Settable to any digit position  
**Overrange Indication:** Flashes 1999  
**External Control:** Hold/Start and decimal points  
**Power Supply:** 5VDC ±5%, 12VDC ±20%, 24VDC±20%  
**Operating Temperature:** 0 ~ 50°C  
**Power Consumption:** 650mW  
**Weight:** 50g, 1.75 oz.  
**Dielectric Strength:** Between input (Lo) terminal and power supply (OV), ±500VDC.  
 Between power supply terminal and case, 1500VAC/1 min.  
**Insulation Resistance:** 500VDC 100MΩ at above terminals  
**Size:** 24mm (H) x 48mm (W) x 73mm (D)  
 .95" (H) x 1.89" (W) x 2.87" (D)  
**Accessories:** 2 Connectors and manual included.

# AP-201A

## 3 1/2 DIGIT, DC PANEL METER

### DC Voltage Measurement

Model	Range	Input Impedance	Input Protection
AP-201A-11	±199.9mV	100M Ω	±10V
AP-201A-12	±1.999V	100M Ω	±100V
AP-201A-13	±19.99V	10M Ω	±250V
AP-201A-14	±199.9V	10M Ω	±500V

Accuracy: ±0.1% rdg + 1 digit (23°C ±5°C)  
 Stability Max. 2 digits for AP-201A-11 only

### Specifications

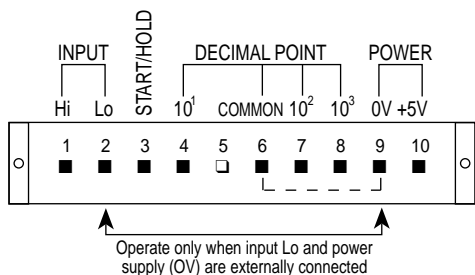
**Input Configuration:** Single Ended  
**Input Bias Current:** 50PA (Typ.)  
**Conversion Rate:** 2.5/sec  
**Normal Mode Rejection:** 40dB (Typ.) (50/60Hz)  
**Zero Stability:** Automatic Zero Adjustment  
**Display:** 3 1/2 digit, LED, 10.2mm (.40")  
**Polarity:** A "-" is displayed automatically  
**Decimal Point:** Settable to any digit position  
**Overrange Indication:** Flashes 1 or -1 of most significant digit  
**External Control:** Hold/Start and decimal points  
**Power Supply:** 5VDC ±5% 60mA (Typ.)  
**Operating Temperature:** 0 ~ 50°C  
**Power Consumption:** Approx. 300mW  
**Weight:** 40g, 1.4 oz.  
**Dielectric Strength:** Between input (Lo) terminal and mounting bracket, 1500VAC/1 min  
**Insulation Resistance:** 500VDC 100MΩ at above terminals  
**Size:** 24mm (H) x 48mm (W) x 73mm (D)  
 .95" (H) x 1.89" (W) x 2.87" (D)  
**Accessories:** Connector and manual included.

### ORDERING GUIDE

AP-201A -  -  -

Range Code	Model	Range
11	AP-201A-11	± 199.9mV
12	AP-201A-12	± 1.999V
13	AP-201A-13	± 19.99V
14	AP-201A-14	± 199.9V

### CONNECTION DIAGRAM (Solder Connector)



### ORDERING GUIDE

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BCD Out	Output	Power Supply	Range Code	Model	Range
1	None	3	11	AP-202A-11	± 199.9mV
2	TTL	4	12	AP-202A-12	± 1.999V
3	Open Collector	5	13	AP-202A-13	± 19.99V
1	None		14	AP-202A-14	± 199.9V
2	BCD (2.5/sec) (Isolated)		21	AP-202A-21	± 199.9μA
6	BCD (12.5/sec 50Hz) (Isolated)		22	AP-202A-22	± 1.999mA
7	BCD (15/sec 60Hz) (Isolated)		23	AP-202A-23	± 19.99mA
			24	AP-202A-24	± 199.9mA
			25	AP-202A-25	± 1.999A

### CONNECTION DIAGRAM (Solder Connector)

