

# DC VOLTMETER & AMMETER

## AP-142

### \*BCD Output (Option)



### ■ DC Voltage Measurement

Model	Range	Maximum Resolution	Input Impedance	Input Protection
AP-142-11	±199.99mV	100μV	100MΩ	±250V
AP-142-12	±1.9999V	100μV	100MΩ	±250V
AP-142-13	±19.999V	1mV	1MΩ	±250V
AP-142-14	±199.99V	10mV	1MΩ	±500V

Accuracy: ±0.03%rdg ±1digit (23°C±5°C)

### ■ Specifications

Input Configuration:	Single Ended
Input Bias Current:	100PA (Typ.)
Conversion Rate:	2.5/sec
Normal Mode Rejection:	More than 50dB (50/60Hz)
Zero Stability:	Automatic Zero Adjustment
Display:	LED 14.2mm 4 1/2-digit
Polarity:	A "-" is displayed automatically
Decimal Point:	Settable to any digit position
Overrange Indication:	When input exceeds the maximum display, 0000 or -0000 flashes.
Power Supply:	AC90~132V AC180~264V DC5V ±5%, 170mA (Max.)
Operating Temperature:	0~50°C, 35 to 85%RH
Power Consumption:	2VA
Dimensions:	48(H) × 96(W) × 73(D)mm DIN Size
Weight:	Approx. 190g (For AC), 125g (For DC)
Dielectric Strength:	AC type: Between input (Lo) terminal and earth, DC ±500V Between power supply terminal and input terminal, earth, common, case, AC1500V/1 min. DC type: Between input (Lo) and power supply (OV), DC ±500V
Insulation Resistance:	DC500V 100MΩ at above terminals

### ■ BCD Data Output (Isolated from input (Lo))

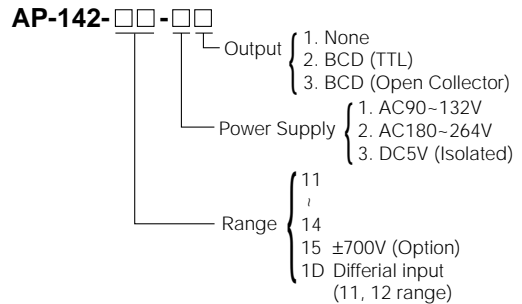
• At Open Collector (option)	
Measured data:	Negative logic transistor "ON" at logic "1"
Polarity signal:	Transistor "ON" at plus input
" OVER " signal:	Transistor "ON" at overflow input
Printing command signal:	Transistor "ON" during a period of approx. 1ms at every measurement completion
Transistor output capacity:	Applied voltage, 30V max. current, 10mA max. Saturated output voltage less than 1.2V at 10mA
(NPN)	

• At TTL level	
Measured data:	Tri-state parallel BCD positive logic latch output
Polarity signal:	"1" level at plus input
"OVER" signal:	"1" level at overflow input
Printing command signal:	A positive pulse of approx 1ms at every measurement completion
Each signal of the above:	TTL level Fanout= 2
*Each signal of the above can be changed to negative logic	

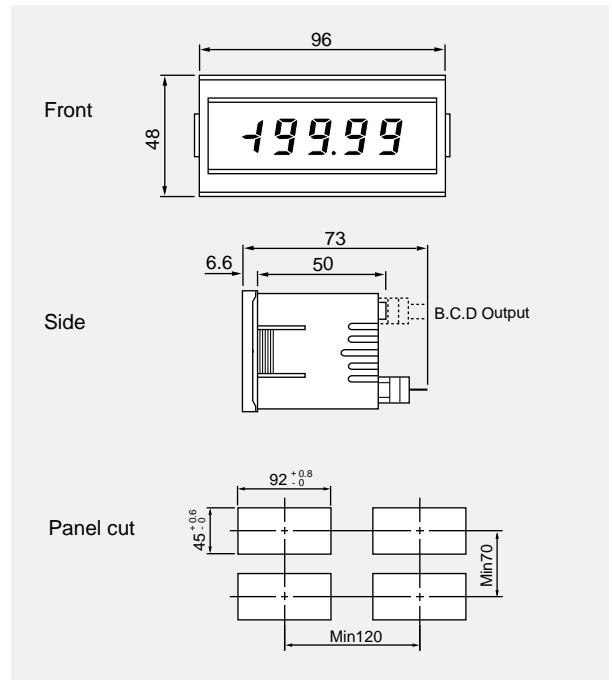
### ■ Features

- BCD (Option)
- Bright LED 14.2mm (Red)
- AC180~264V, 90~132V, DC5V
- 200mV~200V Measurement
- ±700V Measurement (option)
- Current Measurement (option)
- BCD Open Collector available (option)

### ■ Ordering Code



### ■ Dimensions



### ■ Connection Diagram

