

AC VOLTMETER & AMMETER

AP-246

*Miniature Size



■ AC Voltage Measurement

Model code	Range	Input Impedance	Frequency Range	Input Protection
AP-246-12	999.9mV	1.1MΩ	40Hz~1kHz	100V
AP-246-13	9.999V	1.1MΩ	40Hz~1kHz	300V
AP-246-14	99.99V	1MΩ	40Hz~1kHz	300V
AP-246-15	700.0V	10MΩ	40Hz~1kHz	700V

Accuracy: $\pm 0.2\%$ rdg ± 10 digit ($23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)
 $\pm 0.3\%$ rdg ± 10 digit only for AP-246-15

■ AC Current Measurement

Model code	Range	Internal Resistance	Frequency Range	Input Protection
AP-246-22	999.9μA	1kΩ	40Hz~1kHz	10mA
AP-246-23	9.999mA	100Ω	40Hz~1kHz	50mA
AP-246-24	99.99mA	10Ω	40Hz~1kHz	150mA
AP-246-25	999.9mA	1Ω	40Hz~1kHz	3A
AP-246-26	2.000A	0.1Ω	40Hz~1kHz	3A

Accuracy: $\pm 0.3\%$ rdg ± 10 digit ($23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)
 $\pm 0.5\%$ rdg ± 10 digit only for AP-246-26

■ Specifications

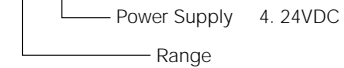
Input Configuration:	Single ended
Rectifier Circuit:	Represents effective value of sine wave by demodulation of mean value
Response Speed:	Approx. 1 sec(10 to 90%)
Conversion Rate:	2.5/sec.
Overrange Indication:	When input exceeds up to 200% flash and renew. When input exceeds 200%, flash 0000
Display:	LED, 10.2mm 4 digit
Decimal Point:	Settable to any digit positions
External Control:	Hold; Hold terminal and 0V terminal Shorted
Power Supply:	24VDC $\pm 20\%$
Operating Temp.:	0 to 50°C, 35 to 85%RH
Power Consumption:	40mA MAX(at 24V DC)
Dimensions:	24(H) × 48(W) × 79(D)mm DIN Size
Weight:	60g
Dielectric Strength:	Between input(Lo)and power supply 0V terminal, 1000VAC/1 min.
Insulation Resistance:	500VDC 100MΩ at above terminals

■ Features

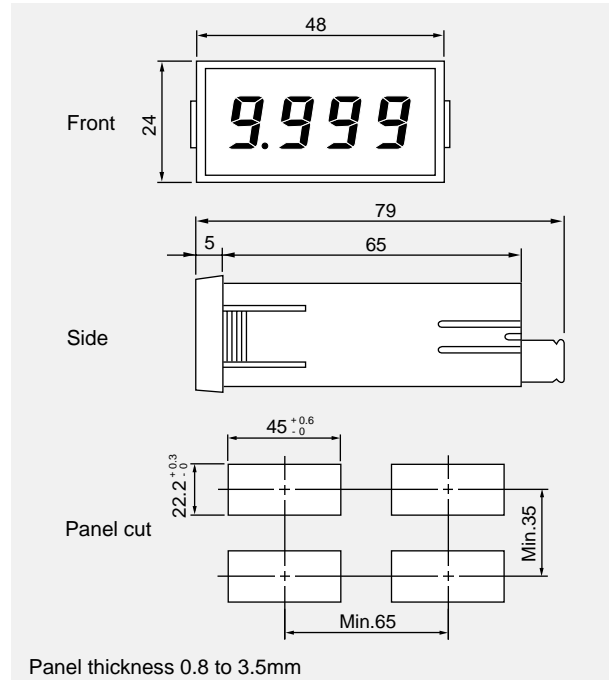
- Average
- Screw Terminal
- LED, 10.2mm(Red)
- Power supply 24VDC-20%(Isolated)
- AC 1V to 700V, 1mA to 2A Measurement

■ Ordering Code

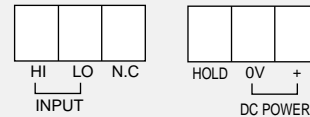
AP-246-□□-4



■ Dimensions



■ Connection Diagram



AC VOLTMETER & AMMETER

AP-247

*TRUE - RMS



■ AC Voltage Measurement

Model	Range	Input Impedance	Frequency Range	Input Protection
AP-247-12	999.9mV	1.1M	40Hz~1kHz	100V
AP-247-13	9.999V	1.1M	40Hz~1kHz	300V
AP-247-14	99.99V	1M	40Hz~1kHz	300V
AP-247-15	700.0V	10M	40Hz~1kHz	700V

Accuracy: $\pm 0.2\%$ rdg ± 20 digit ($23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)
 $\pm 0.3\%$ rdg ± 20 digit only for AP-247-15

■ AC Current Measurement

Model code	Range	Input Impedance	Frequency Range	Input Protection
AP-247-22	999.9 μ A	1k	40Hz~1kHz	10mA
AP-247-23	9.999mA	100	40Hz~1kHz	50mA
AP-247-24	99.99mA	10	40Hz~1kHz	150mA
AP-247-25	999.9mA	1	40Hz~1kHz	3A
AP-247-26	2.000A	0.1	40Hz~1kHz	3A

Accuracy: $\pm 0.5\%$ rdg ± 20 digit ($23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)
 $\pm 0.7\%$ rdg ± 20 digit only for AP-247-26

■ Specifications

Input Configuration:	Single Ended
Rectifier Circuit :	True-RMS value is obtained by AC/DC converter in the analog operation method using transistor V_{be} nlc (log characteristic)
Conversion Rate:	2.5 times/sec
Crest Factor:	4:1 (At fullscale)
Response Speed:	Approx. 1 sec (10% to 90%)
Max. Display:	9999
Overrange Indication:	When input exceeds up to 200%, flash and renew When input exceeds 200%, flash 0000
Display:	LED, 10.2mm
Decimal Point:	Settable to any digit position
External Control:	Hold; HOLD terminal and 0V terminal shorted (Isolated input (Lo))
Operating Temperature:	0 to 50°C , 35 to 85% RH
Power Supply:	24VDC $\pm 20\%$
Power Consumption:	Max. 40mA (at 24VDC)
Dimensions:	24(H) \times 48(W) \times 79(D) mm DIN size
Weight:	Approx. 60g (unit only)
Dielectric Strength:	Input Lo and power supply 0V 1000VAC/1 min.
Insulation Resistance:	500VDC 100M ohms at above terminals
Accessory:	Instruction Manual

■ Features

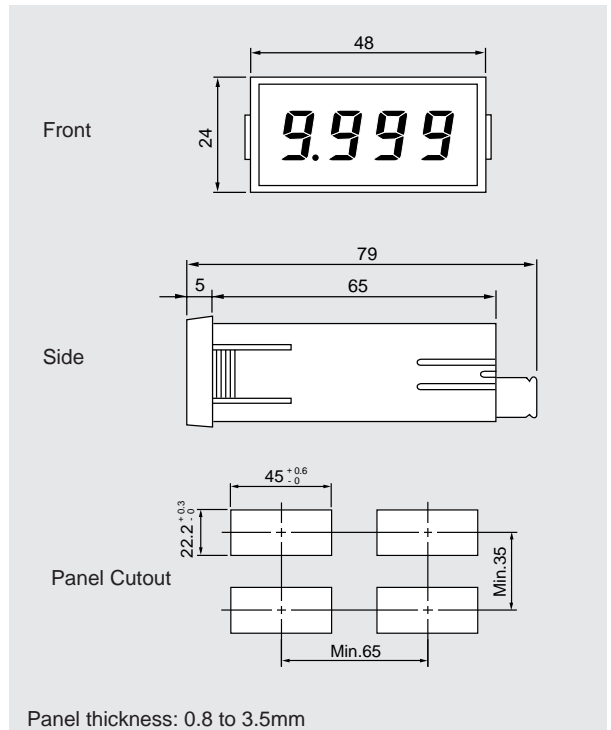
- True-RMS
- Screw Terminal
- LED, 10.2mm (Red)
- Power Supply 24VDC (Isolated)
- AC 1V to 700V, 1mA to 2A Measurement

■ Ordering Code

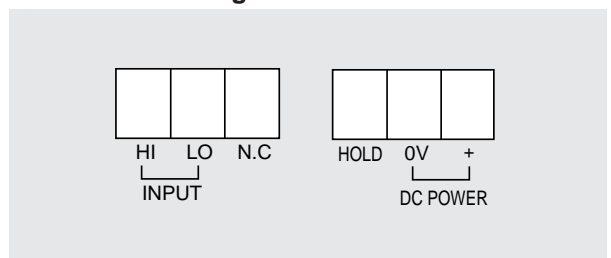
AP-247-□□-4



■ Dimensions



■ Connection Diagram



AC Voltmeter

AP-560

NEW



■ Features

- No need power supply
- Low cost
- Thin case, 1/8 DIN

■ DC Voltage Measurement

Model	Range	Resolution	Input Protection
AP-560-1	60 to 250 V AC	1 V	300 V
AP-560-2	240 to 600 V AC	1 V	700 V

■ Specifications

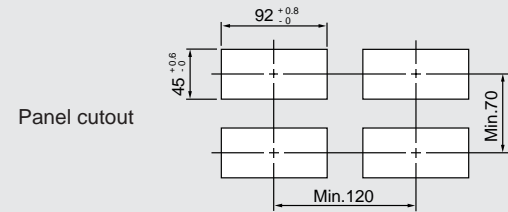
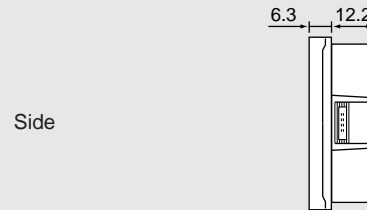
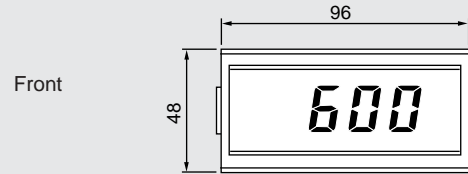
Conversion Rate:	2.5/sec
Overrange Indication:	none
Display:	3 digit, 14.2 mm Red LED
Power Consumption:	35 mA (MAX)
Operating Temp.:	0 to 50°C 35 to 85%RH
Dimensions:	96(W) × 48(H) × 22(D)mm DIN size
Weight:	Approx. 55 g
Dielectric Strength:	input terminal/case, 1500 V DC/1 min
Insulation Resistance:	input terminal/case, more than 100 M ohm at 500 V DC

■ Ordering Code

AP-560-□

1. 60 to 250 V AC
2. 240 to 600 V AC

■ Dimensions



Panel thickness 0.8 to 3.2 mm

■ Connection Diagram

