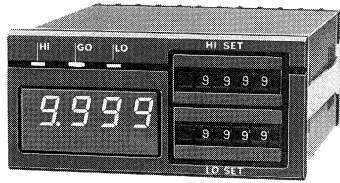


AC VOLTMETER & AMMETER

AM-164A

*TRUE-RMS



■ AC Voltage Measurement

Model	Range	Display Adjustable	Input Impedance	Frequency Range	Input Protection
AM-164A-11	99.99mV	Offset	10MΩ	30Hz~10kHz	10V
AM-164A-12	999.9mV	0~9999	10MΩ	30Hz~10kHz	100V
AM-164A-13	9.999V	Fullscale	10MΩ	30Hz~4kHz	300V
AM-164A-14	99.99V	0~9999	10MΩ	40Hz~1kHz	700V
AM-164A-15	700.0V	0~9999	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 AM-164A-15

■ AC Current Measurement

Model	Range	Display Adjustable	Internal Resistance	Frequency Range	Input Protection
AM-164A-21	99.99μA	Offset	1kΩ	30Hz~10kHz	10mA
AM-164A-22	999.9μA	0~9999	100Ω	30Hz~10kHz	50mA
AM-164A-23	9.999mA	Fullscale	10Ω	30Hz~4kHz	150mA
AM-164A-24	99.99mA	0~9999	1Ω	30Hz~1kHz	500mA

Accuracy: $\pm 0.5\%$ rdg. ± 10 digit ($23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)

■ AC Current Measurement

Model	Range	Display Adjustable	Internal Resistance	Frequency Range	Input Protection
AM-164A-25	999.9mA	Offset	0.1Ω	30Hz~1kHz	3A
AM-164A-26	5A	Fullscale	0.02Ω	40Hz~1kHz	8A

Accuracy: $\pm 0.7\%$ rdg. ± 10 digit ($23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)

■ Specifications

Input Configuration:	Single Ended impedance approx. 10MΩ
Conversion Rate:	2.5/sec
Response Speed:	Approx. 1 sec (10% to 90%)
Crest Factor:	4.1 (At fullscale)
Rectifier Circuit:	True r.m.s. value is obtained by AC/DC converter in the analog operation method using transistor V be $\propto \epsilon \ln i_c$ (Log characteristic)
Zero Stability:	Automatic zero adjustment
Zero Display:	Leading zero suppression
Display:	LED, 10mm 4 digit
Decimal Point:	Settable to any digit position
Overrange Indication:	When input exceeds the maximum display, flash just before overflow
Power Supply:	AC90~132V, AC180~264V
Operating Temperature:	0~50°C, 35 to 85%RH
Dimensions:	48(H) x 96(W) x 144(D)mm DIN Size
Weight:	Approx. 480g
Dielectric Strength:	Between input (Lo) and earth (E), COM, DC500V Between power supply and input, earth (E), relay output AC1500V/1 min.
Insulation Resistance:	DC500V 100MΩ at above terminals
Control System:	8-bit microcomputer
Setting Range:	0~9999
Comparative Conditions:	Indication > High setpoint → HI High set point $\geq$ Indication $\geq$ Low setpoint → GO Indication < Low setpoint → LO AC250V 0.1A Resistive load AC120V 0.5A Resistive load DC28V 1A Resistive load
Relay Contact Capacity:	

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

- At Open Collector
- Measured data: Negative logic transistor "ON" at logic "1"
- "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.
(NPN) current, 10mA max.
Saturated output voltage less than 1.2V at 10mA

- At TTL level
- Measured data: Tri-state parallel BCD positive logic latch output
- "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:
 *Each signal of the above can be changed to negative logic

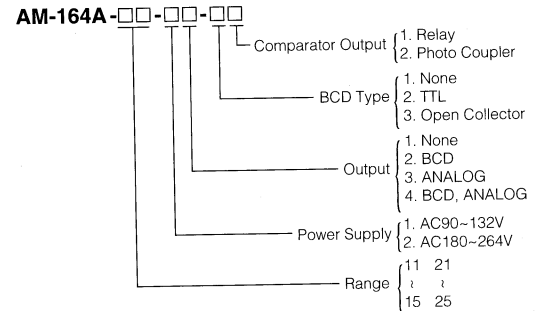
■ Analog Output:

- 0~1V
- 0.5% F.S. ($23^{\circ}\text{C} \pm 5^{\circ}\text{C}$)
- 0.1mV/digit
- 20kΩ or more (load)

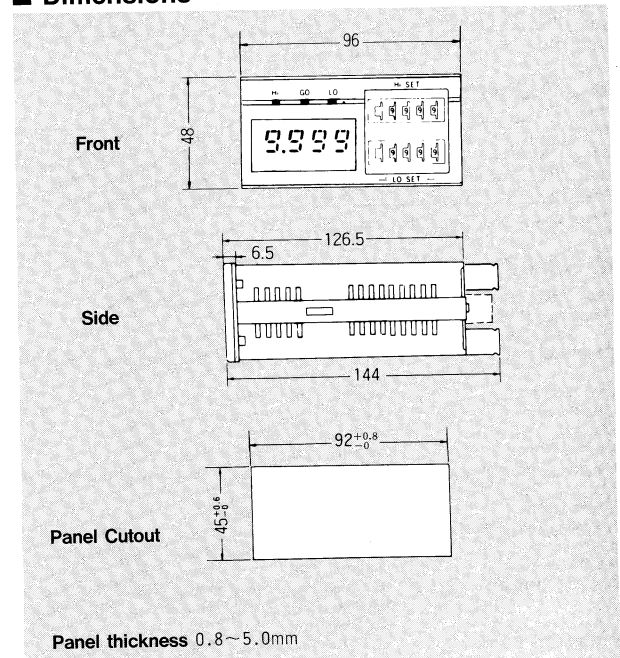
■ Features

- True RMS
- Bright LED, 10mm (Red)
- Hi and Lo setpoint
- Leading zero suppression
- BCD, Analog output (Option)
- AC 100mV~700.0V, 100μA~5A Measurement

■ Ordering Code



■ Dimensions



■ Connection Diagram

