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 0~9999	10MΩ	30Hz~10kHz	10V
AM-164A-12	999.9mV		10MΩ	30Hz~10kHz	100V
AM-164A-13	9.999V	Fullscale 0~9999	10MΩ	30Hz~4kHz	300V
AM-164A-14	99.99V		10MΩ	40Hz~1kHz	700V
AM-164A-15	700.0V		10MΩ	40Hz~1kHz	700V

Accuracy: ±0.2% rdg.±20 digit (23°C±5°C)
±0.3% rdg.±20 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 0~9999	1kΩ	30Hz~10kHz	10mA
AM-164A-22	999.9μA		100Ω	30Hz~10kHz	50mA
AM-164A-23	9.999mA	Fullscale 0~9999	10Ω	30Hz~4kHz	150mA
AM-164A-24	99.99mA		1Ω	30Hz~1kHz	500mA

Accuracy: ±0.5% rdg.±20 digit (23°C ±5°C)

■ AC Current Measurement

Model	Range	Display Adjustable	Internal Resistance	Frequency Range	Input Protection
AM-164A-25	999.9mA	Offset 0~9999 Fullscale 0~9999	0.1Ω	30Hz~1kHz	3A
AM-164A-26	5A		0.02Ω	40Hz~1kHz	8A

Accuracy: ±0.7% rdg.±20 digit (23°C ±5°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 ∝ ℓ nlc (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) × 96(W) × 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 ≧ Indication ≧ Low setpoint → GO Indication < Low setpoint → LO
Relay Contact Capacity:	AC250V 0.1A Resistive load AC120V 0.5A Resistive load DC28V 1A Resistive load

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

• At Open Collector	*Each signal of the above can be changed to negative logic
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: (NPN)	Applied voltage, 30V max. 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:	TTL level Fanout=2

■ Analog Output:

0~1V
0.5% F.S.(23°C±5°C)
0.1mV/digit
20kΩ or more(load)

■ Features

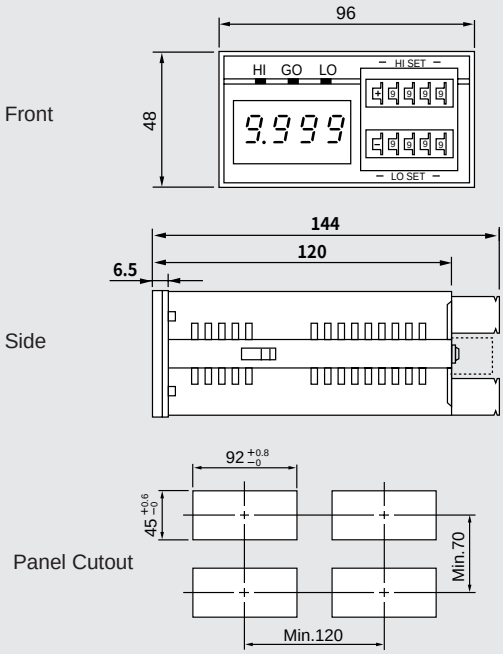
- True RMS
- Bright LED, 10mm (Red)
- Hi and Lo setpoint
- Leading zero suppression
- BCD, Analog output (Option)
- AC 100mV~700.0V, 100μA~5A Measurement

■ Ordering Code

AM-164A -□□-□□-□□

- Comparator Output: 1. Relay, 2. Photo Coupler
- BCD Type: 1. None, 2. TTL, 3. Open Collector
- Output: 1. None, 2. BCD, 3. ANALOG, 4. BCD, ANALOG
- Power Supply: 1. AC90~132V, 2. AC180~264V
- Range: 11 21 / 15 26

■ Dimensions



Panel thickness 0.8 to 5.0mm

■ Connection Diagram