

## AX-1142N Low Cost, High accuracy, Digital DC OHM Meter

Contact-check, thermoelectromotive force cancellation-circuit are standard equipment, available to percentage measurement



• Measuring range: 0.00m  $\Omega \sim 15.000$ M  $\Omega$ 

 $100 \text{m} \Omega \sim 100 \Omega \text{ range:less than 5V}$ 

 $1k\Omega \sim 10M\Omega$  range: less than 15V

- 4-terminal measurement
- Available to measure the persent the set reference value:  $5 \text{m} \Omega \sim 10 \text{M} \Omega \pm 50.0\%$  [Minimum resolution:  $5 \mu \Omega$ ]
- Temperature compensation [0ppm/°C∼9999ppm/°C] (Sensor: Option)
- Measurement not to influenced by thermoelectromotive force.
- Contact-check is equipped as standard function
- GP-IB/RS-232C/Centoronics output available. (Option)
- Comparison result by built-in comparator is open-collector output and displayed as LO, GO, HI by LED and buzzer.

[Humidity] less than 85%

## **Specifications**

Open-circuit voltage of measuring terminal

Measuring range and Accuracy (at23°C±5°C)

Range	Measuring range	Resolution	Measuring current	Accuracy
100m $\Omega$	$0.00$ m $\Omega \sim 150.00$ m $\Omega$	10 μ Ω	100mA	within $\pm 0.05\%$ of rdg $\pm 3$ digit
1000m $\Omega$	$0.0$ m $\Omega \sim 1500.0$ m $\Omega$	100 μ Ω	10mA	
10Ω	0.000 Ω ~ 15.000 Ω	1mΩ	10mA	within $\pm 0.025\%$ of rdg $\pm 3$ digit
100Ω	0.00 Ω ~ 150.00 Ω	10m Ω	5mA	
1kΩ	0.0 Ω ~ 1500.0 Ω	100m Ω	5mA	
10k Ω	0.000kΩ <b>~</b> 15.000kΩ	1Ω	500 μ A	
100k Ω	0.00kΩ ~ 150.00kΩ	10Ω	50 μ A	
1000k Ω	0.0kΩ <b>~</b> 1500.0kΩ	100Ω	5μΑ	
10M Ω	$0.000$ M $\Omega \sim 15.000$ M $\Omega$	1kΩ	0.5 μ A	within $\pm 0.05\%$ of rdg $\pm 3$ digit
%	$5 \text{m}\Omega \sim 10 \text{M}\Omega \pm 50.0\%$	0.1% [5 μ Ω]	Refer to the above	within $\pm 0.2\% \pm 1$ digit

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Measuring method	4-terminal measurement (Contact check available)		
Commiliant times	[Free running mode] 5 times per second~10 times/sec.		
Sampling time	[Remote start mode] about 15msec.~30msec.		
Compositor and reason	[ $\Omega$ measurement] $4\%$ digit, both HI and LO (15000)		
Comparator set range	[% measurement] 50.0% (LO:0 $\sim$ -50.0%, HI:0 $\sim$ +50.0%)		
Indication of comparator's comparison result	LED indication LO/GO/HI and buzzer		
	Input: Remote start input Remote hold input		
Control signal	Output: comparison signal (LO/GO/HI) contact error signal (CE) Completion of the measurement signal (EOC)		

measurement for the setup standard value.

Outer dimension

Operation condition

Power supply

Weight

The Outline Model AX-1142N, digital ohmmeter, can easily measure every resistance from 0.00m $\Omega$  to 15.000M $\Omega$ , it also possible to percentage

[Temp.]  $+5^{\circ}$ C $\sim$   $+40^{\circ}$ C

AC100V~240V selectable, 50/60Hz, about 30VA

about 260 (W)  $\times$  90 (H)  $\times$  250 (D) mm (excluding protruding parts such as rubber legs, etc.)

about 2.6kg

Built -in comparator, it can be informed the judgment result by LED indication for LO, GO, HI, and buzzer, also can be printed out.

- GP-IB Interface
   RS-232C Interface
- Printer output (8 bit parallel Centronics)
- \*Either one interface can built-in the option above.