

Optimum for the auto measurement of Ultra-low Resistor



- Optimum for the Ultra-low resistance measurement such as shunt resistor.
- Measurement not to influenced by thermoelectromotive force.
- Impressed the measuring current at pulse interval, in order to reduce abrasion of measuring terminal.
- Contact-check is equipped as standard function.
- Measuring range : 0.0000mΩ ~ 1.5000kΩ
- Reference resistance value can set between 0.05mΩ ~ 1.4kΩ
- GP-IB/RS-232C two interfaces simultaneous communication available.
- Measurement value can display up to 6.5digits, more detailed display than conventional ones.
- With independent 1mΩ /3A range installation, total 7 range settings.
- Comparator judgement indicating 7 results.

## Specifications

Measuring range and Accuracy (at 23°C±5°C)

Range	Measuring range	Resolution	Measuring current	R measurement Accuracy
1mΩ	0.0000mΩ ~ 1.5000mΩ	0.1 μΩ	3A	± (0.01%rdg + 1 μΩ) ± α digits α : Average(SLOW)=3 Average(FAST)=4 SLOW=4 FAST=6
10mΩ	0.000mΩ ~ 15.000mΩ	1 μΩ		
100mΩ	0.00mΩ ~ 150.00mΩ	10 μΩ	100mA	
1Ω	0.0000Ω ~ 1.5000Ω	100 μΩ		
10Ω	0.000Ω ~ 15.000Ω	1mΩ	10mA	
100Ω	0.00Ω ~ 150.00Ω	10mΩ	1mA	
1kΩ	0.0000kΩ ~ 1.5000kΩ	100mΩ	Refer to the above	
%	0.05mΩ ~ 1.4000kΩ / ±50.00%(display range)	0.01% [50nΩ]		

open-circuit voltage of measuring terminal	about 9V
Measuring method	4-terminal measuring method with contact check.
Sampling time	Free Running : 2~10 times/sec. Remote start : about 18.8msec./32.0msec. (60Hz)
Comparator setting range	upper,lower (0~15000), %Range: 50.00% [low: 0~-50.00%, high: 0~+50.00%]
Indication of comparator's comparison result	LO/LLG/LG/GO/HG/HHG/HI LED display and buzzer
Control signal	Remote start input : "L" [0V] → "H" [DC12V] start Remote hold input: Open and "H" [DC12V] : Free run/"L" [0V] : Hold Comparison output [LO/GO/HI] : Open-collector output max.40V,100mA Contact error output [CE] : Open-collector output max.40V,100mA End of comparison output [EOC] : Open-collector output max.40V,100mA
Operation condition	[Temp.] +5°C ~ +40°C [Humidity] less than 85%
Power supply	AC110V~230V selectable , 50/60Hz , about 60VA
Outer dimension	about 333(W) × 99(H) × 300(D)mm (excluding protruding parts such as rubber legs, etc.)
Weight	about 3.8kg

## The Outline

AX-1156A can measure the ultra low resistance with high speed and high accuracy from 0.0000mΩ to 1.5000kΩ (% Measurement : 0.05mΩ ~ 1.4000kΩ / ±50.00%(display range)).

The unit has DOUBLE Measuring Mode can cancel the thermoelectromotive force which is the cause of errors especially when measuring ultra low resistance, and special auto zero circuit is also available to measure with high accuracy and high stability.

The unit indicates the measured value in digital display and outputs signal outside to judge LO/LLG/LG/GO/HG/HHG/HI decision.

Measuring speed is switchable, AVERAGE/DOUBLE/SLOW/FAST etc. can be selected.

Contact check circuit and measuring current/voltage abnormality check circuit are standard equipment, improving the reliability of measurement furthermore.

The unit can be equipped with any 2 interfaces of GP-IB/RS-232C/Centronics for the option.

### Option

- GP-IB Interface
  - RS-232C Interface
  - Printer output (8 bit parallel Centronics)
  - Printer cable
- \* Any 2 interfaces can built-in option above