

Model AE-1142B Low cost, High accuracy, DC Ohm Meter

3. 4msec High Speed measurement

- Measuring range: $0.00\text{m}\Omega \sim 15.000\text{M}\Omega$
- 4-terminal measurement.
- Available to measure the percent the set reference value:
 $5\text{m}\Omega \sim 10\text{M}\Omega \pm 50.0\%$ 【Minimum resolution of $5\mu\Omega$ 】
- Temperature compensation (Sensor: Optional)【 $0\text{ppm}/^\circ\text{C} \sim 9999\text{ppm}/^\circ\text{C}$ 】
- Measurement not to influenced by thermal electromotive force.
- Impressed the measuring current at pulse interval, in order to reduce abrasion of measuring terminal.
- Contact-check is equipped as standard function.
- Comparison result by built-in comparator is open-collector output and displayed



AEMIC CORPORATION,

model **AE-1142B** Low cost, High accuracy, DC Ohm Meter

SPECIFICATION

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

Range	Measuring range	Resolution	Measuring current	Accuracy [Slow]	Votage at terminals open
100mΩ	0. 00mΩ ~ 150. 00mΩ	10 μ Ω	100mA	Within ±0.05% of rdg ±3digits	Below 5V
1000mΩ	0. 0mΩ ~ 1500. 0mΩ	100 μ Ω	10mA		
10Ω	0. 000Ω ~ 15. 000Ω	1mΩ	5mA	Within ±0.025% of rdg ±3digits	
100Ω	0. 00Ω ~ 150. 00Ω	10mΩ			
1000Ω	0. 0Ω ~ 1500. 0Ω	100mΩ			
10kΩ	0. 000kΩ ~ 15. 000kΩ	1Ω	500μA		
100kΩ	0. 00kΩ ~ 150. 00kΩ	10Ω	50μA		
1000kΩ	0. 0kΩ ~ 1500. 0kΩ	100Ω	5μA		
10MΩ	0. 000MΩ ~ 15. 000MΩ	1kΩ	0.5μA	Within ±0.05% of rdg ±3digits	
%	5mΩ~10MΩ/±50.00%	0.1%【5μΩ】	Mentioned above	Within ±0.2% ±1digits	Mentioned above

Measuring method :	4-terminal measurement with contact check.
Measuring time :	【Free running mode】 2~10times/sec. 【Remote start mode】 about 3.4msec/30msec.
Comparator setting range :	Ω test mode: 0~15000[both for the upper and lower limit] % test mode : 50.0% [LOW:0~-50.0%/ HI:0~+50.0%]
Indication comparator's comparison result :	LO/GO/HI, LED display and buzzer.
Control signal :	input: START "L"[0V]→"H"[DC12V]⇒start HOLD "L"[0V]⇒hold / open or "H"[DC12V]⇒free run output: LO/GO/HI, CONT-E and EOC/ open collector
Operation condition :	【Temp.】 +5°C~+40°C、【Humidity】 below 85%
Outer dimension :	260(W)×90(H)×250(D)mm [excluding protruding parts such as rubber legs, etc.]
Weight :	about 2.0kg
Power supply :	AC85V~265V、 50~60Hz、 about 20VA

O p t i o n	● RS-232C	Only one kind of interface can be provided with the meter.
	● GP-IB	
	● Printer output[Centronics]	
	● Pt Sensor	
	● Printer Cable	
	● Short termination(Zero ohm standard resistor)	

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