

Model AE-1652E Wide range. High Accuracy and High Speed, Digital Resistance Checker

A wide range from low resistor to high resistor measurement is achieved by the highly precise and wonderful speed
Optimum for the on a sorting machine, taping machine and painting conveyor For chip MELF and lead typs resistor of B,C,D,F,G,K and M class

characteristic

- ■Ultra-high accuracy and ultra-high stability by the measuring method rejected thermoelectromotive force.
- ■High stability by the improvement of noise immunity for the isolated circuit between analog part and digital part.
- Available to make the high speed and ultra—high stable measurement by the setting function of average time on measuring value for each range.
- ■Range of measurement for absolute value : $0.000m\Omega \sim 125.00M\Omega$ for % : $5m\Omega \sim 109M\Omega$ [±9.999% / -99.99% ~+25.00%]
- Available to select the function for contact check before or after the measurement, or function of non-contact check.
- (New functions) Contact check function while measurements (Always)
 Available to improve reliable measurement.
- ■RS-232C and Centronics interface are built-in as standard equipment. 【GP-IB is option】
- ■Transfer function of setting data is built—in as standard equipment.

 (Available to transfer the same setting data to another set of AE-1652E)
- The checking circuit of the abnormal measuring current and voltage is built-in.



AEMIC CORPORATION,



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SPECIFICATIONS

Measuring range and Accuracy (at 23°C±5°C), 90days after calibration [1year after calibration: 2times]

			Accuracy			
Range	Standerd setting range	Test Current	SLOW[Hi-Reso.]	FAST[Hi-Reso.]	Additional error1	Additional error2
10m Ω	0.500m Ω ~10.900m Ω	1A	Whith in $\pm 0.010\% \pm 4 \times \beta$ $\pm 10d$	$\pm 0.010\% \pm 4 \times \beta \pm 15d \pm $ [4/(1+n)]d	±(40×γ)	
100mΩ	5.00m Ω ~ 109.00m Ω	1A *100mA	Whith in±0.010%± β ± 5d	Whith in $\pm 0.010\% \pm 2 \times \beta \pm 10d \pm [4/(1+n)]d$		±15×(β+2× γ)
1Ω	0.0500 Ω ~1.0900 Ω	100mA *10mA	Whith in±0.010%± β	Whith in± 0.010%±β±10d±	±(4×γ)	±6×(β+3× γ)
10Ω	0.500 Ω ~10.900 Ω	50mA *5mA	±5d	[2/(1+n)]d	_	$\pm 5 \times (\beta + \gamma)$
100Ω	5.00 Ω ~109.00 Ω	10mA *5mA		Whith in ± 0.010% ±	_	
1k Ω	0.0500k Ω ~ 1.090k Ω	5mA	1	$\beta \pm 10 \pm [1/(1+n)]d$	_	_
10k Ω	0.500k Ω ~ 10.900k Ω	0.5mA	Whith in±0.010%		_	_
100k Ω	5.00k Ω ~109.00k Ω	50 μ A	± β2d		_	_
1ΜΩ	0.0500M Ω ~ 1.0900M Ω	5μΑ		Whith in $\pm 0.025\% \pm \beta 10d \pm [1/(1+n)]d$	_	_
10MΩ	0.500M Ω ~10.900M Ω	0.5 μ Α	Whith in±0.02%±β ±10d	Whith in $\pm 0.1\% \pm \beta \pm 20d \pm [1/(1+n)]d$	_	_
100MΩ	5.00M Ω ~ 109.00M Ω	0.05 μ Α	Whith in±0.1%±β± 20d	-	_	_

d:digits n:program[12] measurement time(msec) in case of absolute varue: apply to LO-Reso(add to $\pm 1d$) *Program[18]In case of Lo current mode is ON in case of %value: $\alpha = (100/\text{standerd setting value }10\text{m}\Omega) \times 0.01\%$, $\alpha = 0$

 β =(range//standerd setting valu)×0.001% γ =(β /average setting value)program [17]average count

	exter	nal start	Free running		
Measurement time	SLOW	FAST	SLOW	FAST	
	about 17sec.~36msec.	about 0.7msec.~23msec.	about30count/sec ~ about	About 60 count/sec∼about	
			5count/sec	10 count/sec	

Test terminalopen voltage	below 15V
EOC[Endofcomparison]pulsewidth	1∼250msec. or continuative
Measuring method	2 or 4 terminal measurement
Comparator set range	% range:±9.999% ✓ -99.99%~+25.00%
	Absolute value:00000~12500
Operation condition	temperature:0°C~+50°C, humidity:80%below
Power supply	AC85V~265V, 50~60Hz, about 50VA
Outer dimension	333(W)×99(H)×300(D)mm(excluding protruding parts such as rubber legs, etc)
Weight	About 3.6kg

OPTION	● GP-IB	
OPTION	Data cable	
	Short termination(Zero ohm standard resistor)	

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