New Resistance Checker AE-162F (AE-162E successor model)

【overview】

Main changes from AE-162E

CPU board renewal
＊The measurement board uses the same board as the proven AE-162E.

⇒**Shortened measurement time**
(No change in measurement reproducibility)

[New CPU board]

Replace 162E CPU board
with 162F CPU board

Measurement time of existing AE-162E can be shortened.

【 overview 】

Other changes

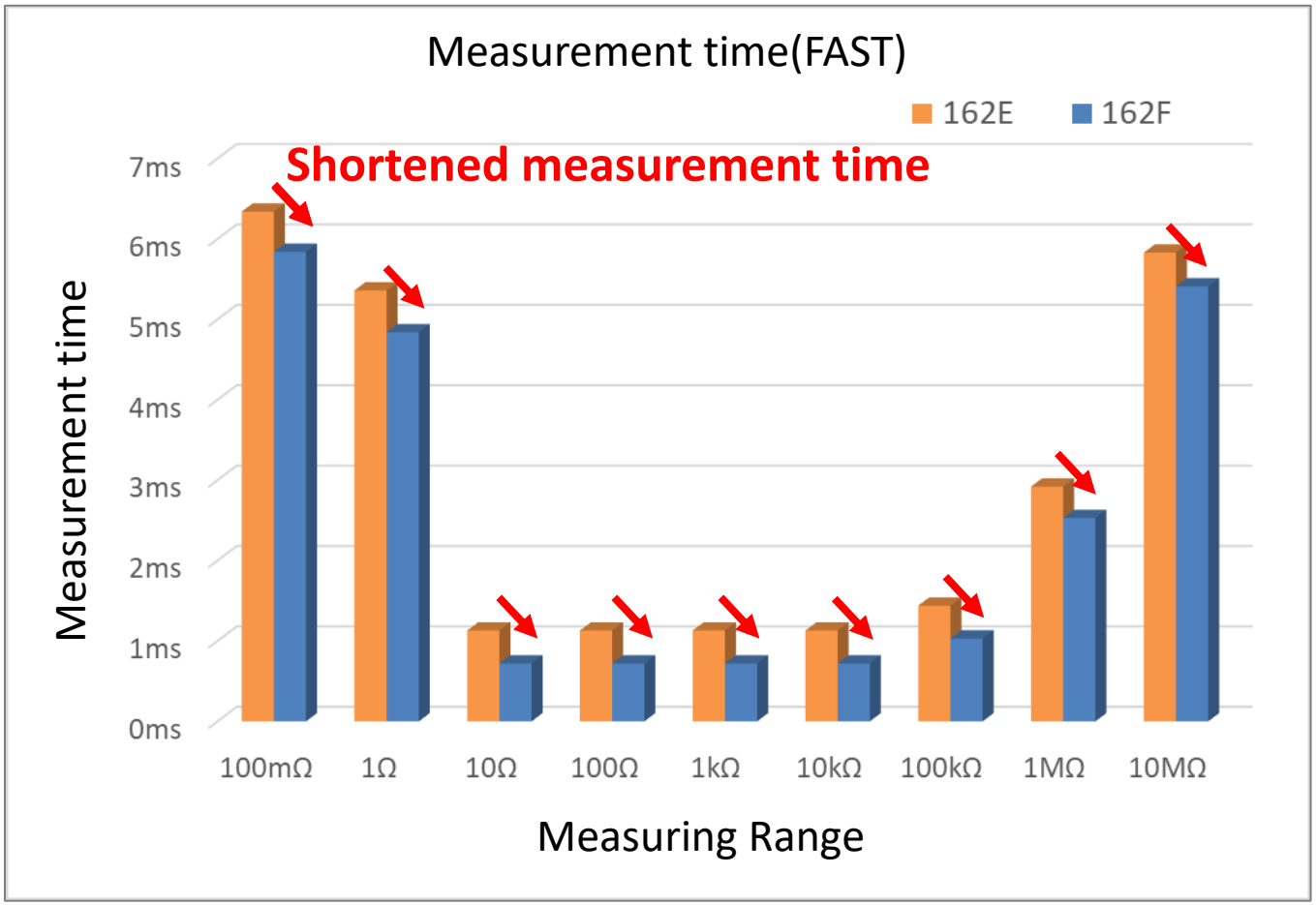
・Only the RS232C data length setting has been changed.

RS232C settings	AE-162F	AE-162E
data length	8 bit only	7 bit or 8 bit

*Other settings are the same as AE-162E.

【Shortened measurement time】

The CPU change has increased processing speed and shortened measurement time.



Comparison with initial values (setting at the shuipment)

【Repeatability test】

Although the measurement time has been shortened, repeatability remains the same as before.

◎Measurement speed setting：FAST

Range	Test Value	Standard Value		Criteria	Measured values with conventional CPU		Variation width	Measured values with new CPU		Variation width
		Standard setting	(Test Value-Standard Value)/Standard value		MIN	MAX		MIN	MAX	
100 mΩ	9.999943 mΩ	10.10 mΩ	−0.9901%	± 0.54 %	−1.09%	−0.83%	0.26%	−1.13%	−0.87%	0.26%
	100.00114 mΩ	100.00 mΩ	0.0000%	± 0.13 %	−0.02%	0.00%	0.02%	−0.01%	0.01%	0.02%
1 Ω	0.10000114 Ω	0.1010 Ω	−0.9901%	± 0.22 %	−1.00%	−0.97%	0.03%	−1.01%	−0.98%	0.03%
	1.0000009 Ω	1.0000 Ω	0.0020%	± 0.09 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10 Ω	1.0000009 Ω	1.010 Ω	−0.9881%	± 0.22 %	−1.00%	−0.99%	0.01%	−1.00%	−0.99%	0.01%
	10.000015 Ω	10.000 Ω	0.0020%	± 0.09 %	0.00%	0.01%	0.01%	−0.01%	0.00%	0.01%
100 Ω	10.000015 Ω	10.10 Ω	−0.9881%	± 0.07 %	−1.00%	−0.99%	0.01%	−1.00%	−0.99%	0.01%
	100.00023 Ω	100.00 Ω	0.0020%	± 0.07 %	−0.01%	0.00%	0.01%	−0.01%	0.00%	0.01%
1 kΩ	0.10000023 kΩ	0.1010 kΩ	−0.9881%	± 0.07 %	−1.00%	−0.99%	0.01%	−1.00%	−0.99%	0.01%
	0.9999992 kΩ	1.0000 kΩ	0.0010%	± 0.07 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10 kΩ	0.9999992 kΩ	1.010 kΩ	−0.9891%	± 0.07 %	−1.00%	−0.99%	0.01%	−1.00%	−0.99%	0.01%
	9.999964 kΩ	10.000 kΩ	0.0030%	± 0.07 %	−0.01%	0.00%	0.01%	−0.01%	0.00%	0.01%
100 kΩ	9.999964 kΩ	10.100 kΩ	−0.9871%	± 0.07 %	−1.00%	−0.99%	0.01%	−1.00%	−0.99%	0.01%
	100.00041 kΩ	100.000 kΩ	−0.0005%	± 0.07 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1 MΩ	0.10000041 MΩ	0.1010 MΩ	−0.9906%	± 0.12 %	−0.99%	−0.99%	0.00%	−0.99%	−0.99%	0.00%
	1.0000004 MΩ	1.0000 MΩ	0.0020%	± 0.12 %	0.00%	0.01%	0.01%	0.00%	0.01%	0.01%
10 MΩ	1.0000004 MΩ	1.010 MΩ	−0.9881%	± 0.37 %	−1.00%	−0.98%	0.02%	−0.99%	−0.97%	0.02%
	10.00000 MΩ	10.000 MΩ	−0.0004%	± 0.37 %	−0.01%	0.00%	0.01%	−0.01%	0.00%	0.01%

【 Repeatability test 】

AE·MIC
AEMIC CORPORATION

Similarly, in the case of SLOW, the repeatability is the same as before.

◎ Measurement speed setting ：SLOW

Range	Test Value	Standard Value		Criteria	Measured values with conventional CPU		Variation width	Measured values with new CPU		Variation width
		Standard setting	(Test Value-Standard Value)/Standard value		MIN	MAX		MIN	MAX	
100 mΩ	9.999943 mΩ	10.10 mΩ	−0.9901%	± 0.36 %	−1.07%	−0.88%	0.19%	−1.08%	−0.89%	0.19%
	100.00114 mΩ	100.00 mΩ	0.0000%	± 0.09 %	−0.01%	0.01%	0.02%	−0.02%	0.00%	0.02%
1 Ω	0.10000114 Ω	0.1010 Ω	−0.9901%	± 0.19 %	−1.00%	−0.98%	0.02%	−1.00%	−0.98%	0.02%
	1.0000009 Ω	1.0000 Ω	0.0020%	± 0.06 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10 Ω	1.0000009 Ω	1.010 Ω	−0.9881%	± 0.19 %	−1.00%	−0.99%	0.01%	−1.00%	−0.99%	0.01%
	10.000015 Ω	10.000 Ω	0.0020%	± 0.06 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
100 Ω	10.000015 Ω	10.10 Ω	−0.9881%	± 0.04 %	−0.99%	−0.99%	0.00%	−0.99%	−0.99%	0.00%
	100.00023 Ω	100.00 Ω	0.0020%	± 0.04 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1 kΩ	0.10000023 kΩ	0.1010 kΩ	−0.9881%	± 0.04 %	−0.99%	−0.99%	0.00%	−0.99%	−0.99%	0.00%
	0.9999992 kΩ	1.0000 kΩ	0.0010%	± 0.04 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10 kΩ	0.9999992 kΩ	1.010 kΩ	−0.9891%	± 0.04 %	−0.99%	−0.99%	0.00%	−0.99%	−0.99%	0.00%
	9.999964 kΩ	10.000 kΩ	0.0030%	± 0.04 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
100 kΩ	9.999964 kΩ	10.100 kΩ	−0.9871%	± 0.04 %	−0.99%	−0.99%	0.00%	−0.99%	−0.99%	0.00%
	100.00041 kΩ	100.000 kΩ	−0.0005%	± 0.04 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1 MΩ	0.10000041 MΩ	0.1010 MΩ	−0.9906%	± 0.04 %	−0.99%	−0.99%	0.00%	−0.99%	−0.99%	0.00%
	1.0000004 MΩ	1.0000 MΩ	0.0020%	± 0.04 %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
10 MΩ	1.0000004 MΩ	1.010 MΩ	−0.9881%	± 0.06 %	−0.99%	−0.99%	0.00%	−0.99%	−0.99%	0.00%
	10.00000 MΩ	10.000 MΩ	−0.0004%	± 0.06 %	−0.01%	0.00%	0.01%	−0.01%	0.00%	0.01%
100 MΩ	10.00000 MΩ	10.10 MΩ	−0.9905%	± 0.18 %	−1.00%	−0.98%	0.02%	−1.00%	−0.98%	0.02%
	100.002 MΩ	100.00 MΩ	0.0000%	± 0.18 %	0.00%	0.01%	0.01%	0.00%	0.01%	0.01%

【Switching models in the future】

・We will inform you when the AE-162E will be discontinued.

・By replacing the existing AE-162E control board, measurement time can be reduced. We hope you will consider replacing the AE162E board.

【Contact】

Location: 34, Takeda-higashi-koyanouchi-cho, Fushimi-ku, Kyoto, Japan
TEL: +81-75-612-0710
E-MAIL: sales@ae-mic.com