

# Sertifikat Kalibrasi

## Calibration Certificate

Certificate number:

Order number:

### Deskripsi Objek yang Dikalibrasi/Diukur

*Description of object being calibrated or measured*

Jenis alat atau objek : Digital Multimeter

*Type of instrument or object*

Merek/pembuat dan tipe : Fluke 5730A

*Brand/manufacturer and type*

Identifikasi alat

*Instrument identification*

Nomor seri : -

*Serial number*

Identifikasi lain :

*Other identification*

### Identitas Pemilik

*Owner's identification*

Nama :

*Designation*

Alamat : , , ,

*Address*

### Pengesahan

*Authorization*

Pejabat yang mengesahkan : Direktur SNSU Termoelektrik dan Kimia

*Authorizing officer*

Nama : Dr. Ghufroon Zaid

*Name* NIP 19711104 199012 1 001

Tanggal pengesahan :

*Date of issue (dd/mm/yyyy)*

Jumlah halaman (termasuk :

halaman ini)

*Total number of pages including this one*

Dokumen ini disahkan secara elektronik sesuai peraturan yang berlaku dengan sertifikat dari Balai Sertifikasi Elektronik (BsrE) dan tidak memerlukan tanda tangan atau cap. Dokumen asli dapat diperoleh dengan memindai kode QR di samping ini.

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Kalibrasi atau pengukuran yang dilaporkan dalam sertifikat ini tercakup dalam lingkup akreditasi menurut SNI ISO/IEC 17025 oleh Komite Akreditasi Nasional, kecuali dinyatakan dalam badan sertifikat.

*The calibration or measurement reported in the certificate is covered in the accreditation scope according to SNI ISO/IEC 17025 by the National Accreditation Committee of Indonesia, unless marked otherwise in the body of certificate.*

Nama Alat/*Instrument Name* : Digital Multimeter  
Pembuat/*Manufacturer* : Fluke  
Model/*Model* : 5730A  
No. Seri/*Serial Number* : -  
Tanggal Kalibrasi/*Calibration Date* : -  
Tempat Kalibrasi/*Calibration Place* : laboratory

### Hasil Kalibrasi/*Calibration Result*

#### **Kondisi Ruangan/*Environmental Condition***

Suhu/*Temperature* :  $(22.0 \pm 24.0)^{\circ}\text{C}$   
Kelembapan/*Humidity* :  $(49.0 \pm 59.0)\%$

#### **Tegangan DC / *DC Voltage***

Rentang <i>Range</i>	Titik Ukur <i>Measurement Point</i>	Pembacaan Alat <i>Instrument Reading</i>	Koreksi <i>Correction</i>	Ketidakpastian <i>Uncertainty</i>
100 mV	0 mV	0.0000 mV	0.0000 mV	0.0013 mV
100 mV	10 mV	10.0000 mV	-0.0001 mV	0.0014 mV
100 mV	-10 mV	-10.0000 mV	0.0000 mV	0.0014 mV
100 mV	50 mV	50.0000 mV	-0.0005 mV	0.0016 mV
100 mV	-50 mV	-50.0000 mV	-0.0001 mV	0.0016 mV
100 mV	90 mV	90.0000 mV	-0.0009 mV	0.0018 mV
100 mV	-90 mV	-90.0000 mV	-0.0001 mV	0.0018 mV
100 mV	100 mV	100.0000 mV	-0.0010 mV	0.0019 mV
100 mV	-100 mV	-100.0000 mV	-0.0001 mV	0.0019 mV
1 V	0.1 V	0.1000000 V	-0.0000010 V	0.0000019 V
1 V	-0.1 V	-0.1000000 V	-0.0000001 V	0.0000019 V
1 V	0.5 V	0.5000000 V	-0.0000017 V	0.0000047 V
1 V	-0.5 V	-0.5000000 V	0.0000006 V	0.0000047 V
1 V	0.9 V	0.9000000 V	-0.0000020 V	0.0000072 V
1 V	-0.9 V	-0.9000000 V	0.0000005 V	0.0000071 V
1 V	1 V	1.0000000 V	-0.0000021 V	0.0000078 V
1 V	-1 V	-1.0000000 V	0.0000005 V	0.0000078 V
10 V	1 V	1.0000000 V	-0.0000021 V	0.0000079 V
10 V	-1 V	-1.0000000 V	0.0000005 V	0.0000078 V
10 V	2 V	2.000000 V	-0.000003 V	0.000014 V
10 V	3 V	3.000000 V	-0.000010 V	0.000027 V
10 V	4 V	4.000000 V	-0.000012 V	0.000029 V
10 V	5 V	5.000000 V	-0.000013 V	0.000032 V
10 V	-5 V	-5.000000 V	0.000010 V	0.000032 V
10 V	6 V	6.000000 V	-0.000015 V	0.000045 V
10 V	7 V	7.000000 V	-0.000016 V	0.000048 V
10 V	8 V	8.000000 V	-0.000018 V	0.000050 V
10 V	9 V	9.000000 V	-0.000020 V	0.000053 V
10 V	-9 V	-9.000000 V	0.000008 V	0.000053 V
10 V	10 V	10.000000 V	-0.000021 V	0.000058 V
10 V	-10 V	-10.000000 V	0.000008 V	0.000058 V
100 V	10 V	10.000000 V	-0.000021 V	0.000059 V
100 V	-10 V	-10.000000 V	0.000008 V	0.000059 V
100 V	50 V	50.00000 V	-0.00003 V	0.00046 V
100 V	-50 V	-50.00000 V	0.00005 V	0.00046 V

**Tegangan DC / DC Voltage**

<b>Rentang</b> <i>Range</i>	<b>Titik Ukur</b> <i>Measurement Point</i>	<b>Pembacaan Alat</b> <i>Instrument Reading</i>	<b>Koreksi</b> <i>Correction</i>	<b>Ketidakpastian</b> <i>Uncertainty</i>
100 V	90 V	90.00000 V	-0.00005 V	0.00076 V
100 V	-90 V	-90.00000 V	0.00005 V	0.00076 V
100 V	100 V	100.00000 V	-0.00006 V	0.00083 V
100 V	-100 V	-100.00000 V	0.00005 V	0.00083 V
1000 V	100 V	100.00000 V	-0.00006 V	0.00084 V
1000 V	-100 V	-100.00000 V	0.00005 V	0.00084 V
1000 V	500 V	500.0000 V	-0.0006 V	0.0043 V
1000 V	-500 V	-500.0000 V	0.0001 V	0.0043 V
1000 V	900 V	900.0000 V	-0.0008 V	0.0077 V
1000 V	-900 V	-900.0000 V	0.0003 V	0.0077 V
1000 V	1000 V	1000.0000 V	-0.0008 V	0.0082 V
1000 V	-1000 V	-1000.0000 V	0.0004 V	0.0082 V

**Arus DC / DC Current**

<b>Rentang</b> <i>Range</i>	<b>Titik Ukur</b> <i>Measurement Point</i>	<b>Pembacaan Alat</b> <i>Instrument Reading</i>	<b>Koreksi</b> <i>Correction</i>	<b>Ketidakpastian</b> <i>Uncertainty</i>
100 $\mu$ A	0 $\mu$ A	0.0015 $\mu$ A	0.0026 $\mu$ A	0.0070 $\mu$ A
100 $\mu$ A	10 $\mu$ A	9.9984 $\mu$ A	0.0056 $\mu$ A	0.0075 $\mu$ A
100 $\mu$ A	-10 $\mu$ A	-10.0013 $\mu$ A	0.0056 $\mu$ A	0.0075 $\mu$ A
100 $\mu$ A	50 $\mu$ A	49.9976 $\mu$ A	0.0058 $\mu$ A	0.0094 $\mu$ A
100 $\mu$ A	-50 $\mu$ A	-50.0005 $\mu$ A	0.0052 $\mu$ A	0.0093 $\mu$ A
100 $\mu$ A	90 $\mu$ A	89.997 $\mu$ A	0.006 $\mu$ A	0.011 $\mu$ A
100 $\mu$ A	-90 $\mu$ A	-90.000 $\mu$ A	0.005 $\mu$ A	0.011 $\mu$ A
100 $\mu$ A	100 $\mu$ A	99.997 $\mu$ A	0.006 $\mu$ A	0.012 $\mu$ A
100 $\mu$ A	-100 $\mu$ A	-100.000 $\mu$ A	0.005 $\mu$ A	0.012 $\mu$ A
1 mA	0.1 mA	0.099992 mA	0.000011 mA	0.000012 mA
1 mA	-0.1 mA	-0.100018 mA	0.000023 mA	0.000015 mA
1 mA	0.5 mA	0.500020 mA	-0.000014 mA	0.000032 mA
1 mA	-0.5 mA	-0.500042 mA	0.000048 mA	0.000037 mA
1 mA	0.9 mA	0.900045 mA	-0.000039 mA	0.000052 mA
1 mA	-0.9 mA	-0.900066 mA	0.000071 mA	0.000057 mA
1 mA	1 mA	1.000051 mA	-0.000045 mA	0.000057 mA
1 mA	-1 mA	-1.000072 mA	0.000078 mA	0.000062 mA
10 mA	1 mA	0.999881 mA	0.000125 mA	0.000079 mA
10 mA	-1 mA	-1.000147 mA	0.000153 mA	0.000089 mA
10 mA	2 mA	1.99989 mA	0.00011 mA	0.00011 mA
10 mA	3 mA	2.99995 mA	0.00009 mA	0.00020 mA
10 mA	4 mA	3.99997 mA	0.00007 mA	0.00024 mA
10 mA	5 mA	5.00000 mA	0.00005 mA	0.00027 mA
10 mA	-5 mA	-5.00021 mA	0.00020 mA	0.00029 mA
10 mA	6 mA	6.00001 mA	0.00004 mA	0.00032 mA
10 mA	7 mA	7.00003 mA	0.00004 mA	0.00036 mA
10 mA	8 mA	8.00005 mA	0.00002 mA	0.00040 mA
10 mA	9 mA	9.00007 mA	0.00001 mA	0.00044 mA
10 mA	-9 mA	-9.00029 mA	0.00025 mA	0.00046 mA
10 mA	10 mA	10.00009 mA	-0.00001 mA	0.00048 mA
10 mA	-10 mA	-10.00032 mA	0.00027 mA	0.00050 mA
100 mA	10 mA	10.00016 mA	-0.00008 mA	0.00049 mA
100 mA	-10 mA	-10.0027 mA	0.0027 mA	0.0014 mA
100 mA	50 mA	50.0063 mA	-0.0052 mA	0.0051 mA
100 mA	-50 mA	-50.0083 mA	0.0083 mA	0.0057 mA
100 mA	90 mA	90.0123 mA	-0.0107 mA	0.0090 mA
100 mA	-90 mA	-90.0145 mA	0.0145 mA	0.0098 mA
100 mA	100 mA	100.014 mA	-0.012 mA	0.010 mA
100 mA	-100 mA	-100.016 mA	0.016 mA	0.011 mA
1 A	0.1 A	0.099984 A	0.000018 A	0.000011 A
1 A	-0.1 A	-0.100014 A	0.000014 A	0.000010 A
1 A	0.5 A	0.49999 A	0.00000 A	0.00013 A

**Arus DC / DC Current**

<b>Rentang</b>	<b>Titik Ukur</b>	<b>Pembacaan Alat</b>	<b>Koreksi</b>	<b>Ketidakpastian</b>
<i>Range</i>	<i>Measurement Point</i>	<i>Instrument Reading</i>	<i>Correction</i>	<i>Uncertainty</i>
1 A	-0.5 A	-0.50001 A	0.00004 A	0.00013 A
1 A	0.9 A	0.89997 A	0.00000 A	0.00021 A
1 A	-0.9 A	-0.90000 A	0.00004 A	0.00021 A
1 A	1 A	0.99997 A	0.00000 A	0.00024 A
1 A	-1 A	-0.99998 A	0.00003 A	0.00024 A

**Tegangan AC / AC Voltage**

<b>Rentang</b>	<b>Titik Ukur</b>	<b>Frekuensi</b>	<b>Pembacaan Alat</b>	<b>Koreksi</b>	<b>Ketidakpastian</b>
<i>Range</i>	<i>Measurement Point</i>	<i>Frequency</i>	<i>Instrument Reading</i>	<i>Correction</i>	<i>Uncertainty</i>
10 mV	10 mV	20 Hz	10.0000 mV	-0.0002 mV	0.0057 mV
10 mV	10 mV	50 Hz	10.0000 mV	-0.0004 mV	0.0056 mV
10 mV	10 mV	1 kHz	10.0000 mV	-0.0004 mV	0.0056 mV
10 mV	10 mV	10 kHz	10.0000 mV	-0.0010 mV	0.0057 mV
10 mV	10 mV	20 kHz	10.0000 mV	-0.0052 mV	0.0087 mV
100 mV	20 mV	50 kHz	20.000 mV	-0.012 mV	0.018 mV
100 mV	30 mV	100 kHz	30.000 mV	-0.026 mV	0.090 mV
100 mV	50 mV	40 Hz	50.000 mV	0.000 mV	0.012 mV
100 mV	100 mV	80 Hz	100.000 mV	0.000 mV	0.015 mV
100 mV	100 mV	20 Hz	100.000 mV	0.001 mV	0.025 mV
100 mV	100 mV	50 Hz	100.000 mV	0.000 mV	0.021 mV
100 mV	100 mV	1 kHz	100.000 mV	0.000 mV	0.021 mV
100 mV	100 mV	10 kHz	100.000 mV	-0.012 mV	0.047 mV
100 mV	100 mV	20 kHz	100.00 mV	0.10 mV	0.11 mV
100 mV	100 mV	50 kHz	100.00 mV	0.10 mV	0.12 mV
100 mV	100 mV	100 kHz	100.00 mV	-0.07 mV	0.15 mV
1 V	0.1 V	20 Hz	0.100000 V	0.000001 V	0.000025 V
1 V	0.1 V	50 Hz	0.100000 V	0.000000 V	0.000021 V
1 V	0.1 V	1 kHz	0.100000 V	0.000000 V	0.000021 V
1 V	0.1 V	10 kHz	0.100000 V	-0.000012 V	0.000047 V
1 V	0.1 V	20 kHz	0.10000 V	0.00010 V	0.00011 V
1 V	0.1 V	50 kHz	0.10000 V	0.00010 V	0.00012 V
1 V	0.1 V	100 kHz	0.10000 V	-0.00007 V	0.00015 V
1 V	0.3 V	80 Hz	0.300000 V	0.000026 V	0.000097 V
1 V	0.4 V	100 Hz	0.400000 V	0.000031 V	0.000099 V
1 V	1 V	160 Hz	0.50000 V	0.00004 V	0.00010 V
1 V	1 V	200 Hz	0.50000 V	0.00004 V	0.00010 V
1 V	1 V	400 Hz	0.60000 V	0.00004 V	0.00010 V
1 V	1 V	500 Hz	0.60000 V	0.00004 V	0.00010 V
1 V	1 V	1 kHz	0.80000 V	0.00005 V	0.00011 V
1 V	1 V	2 kHz	0.80000 V	0.00010 V	0.00013 V
1 V	1 V	20 Hz	1.00000 V	0.00007 V	0.00018 V
1 V	1 V	50 Hz	1.00000 V	0.00006 V	0.00011 V
1 V	1 V	1 kHz	1.00000 V	0.00006 V	0.00011 V
1 V	1 V	10 kHz	1.00000 V	-0.00006 V	0.00029 V
1 V	1 V	20 kHz	1.00000 V	-0.00052 V	0.00082 V
1 V	1 V	50 kHz	1.00000 V	-0.00052 V	0.00088 V
1 V	1 V	100 kHz	1.00000 V	-0.00047 V	0.00097 V
10 V	1 V	20 Hz	1.00000 V	0.00007 V	0.00018 V
10 V	1 V	50 Hz	1.00000 V	0.00006 V	0.00011 V
10 V	1 V	1 kHz	1.00000 V	0.00006 V	0.00011 V
10 V	1 V	2 kHz	1.00000 V	0.00013 V	0.00013 V
10 V	1 V	4 kHz	1.00000 V	0.00013 V	0.00013 V
10 V	1 V	5 kHz	1.00000 V	0.00013 V	0.00013 V
10 V	1 V	10 kHz	1.00000 V	-0.00006 V	0.00029 V
10 V	1 V	20 kHz	1.00000 V	-0.00052 V	0.00082 V
10 V	1 V	50 kHz	1.00000 V	-0.00052 V	0.00088 V
10 V	1 V	100 kHz	1.00000 V	-0.00047 V	0.00097 V
10 V	5 V	20 Hz	5.0000 V	0.0004 V	0.0014 V

**Tegangan AC / AC Voltage**

<b>Rentang</b>	<b>Titik Ukur</b>	<b>Frekuensi</b>	<b>Pembacaan Alat</b>	<b>Koreksi</b>	<b>Ketidakpastian</b>
<i>Range</i>	<i>Measurement Point</i>	<i>Frequency</i>	<i>Instrument Reading</i>	<i>Correction</i>	<i>Uncertainty</i>
10 V	5 V	50 Hz	5.0000 V	0.0006 V	0.0010 V
10 V	5 V	1 kHz	5.0000 V	0.0006 V	0.0010 V
10 V	5 V	10 kHz	5.0000 V	-0.0004 V	0.0028 V
10 V	5 V	20 kHz	5.0000 V	-0.0010 V	0.0082 V
10 V	5 V	50 kHz	5.0000 V	-0.0010 V	0.0082 V
10 V	5 V	20 kHz	5.0000 V	-0.0010 V	0.0082 V
10 V	10 V	20 Hz	10.0000 V	0.0006 V	0.0017 V
10 V	10 V	50 Hz	10.0000 V	0.0010 V	0.0011 V
10 V	10 V	1 kHz	10.0000 V	0.0010 V	0.0011 V
10 V	10 V	10 kHz	10.0000 V	-0.0009 V	0.0028 V
10 V	10 V	20 kHz	10.0000 V	-0.0021 V	0.0082 V
10 V	10 V	50 kHz	10.0000 V	-0.0021 V	0.0082 V
10 V	10 V	100 kHz	10.0000 V	-0.0038 V	0.0092 V
100 V	10 V	20 Hz	10.0000 V	0.0006 V	0.0017 V
100 V	10 V	50 Hz	10.0000 V	0.0010 V	0.0011 V
100 V	10 V	1 kHz	10.0000 V	0.0010 V	0.0011 V
100 V	10 V	10 kHz	10.0000 V	-0.0009 V	0.0028 V
100 V	10 V	20 kHz	10.0000 V	-0.0021 V	0.0082 V
100 V	10 V	50 kHz	10.0000 V	-0.0021 V	0.0082 V
100 V	10 V	100 kHz	10.0000 V	-0.0038 V	0.0092 V
100 V	100 V	20 Hz	100.000 V	0.000 V	0.017 V
100 V	100 V	50 Hz	100.000 V	-0.003 V	0.012 V
100 V	100 V	1 kHz	100.000 V	-0.003 V	0.012 V
100 V	100 V	10 kHz	100.000 V	-0.029 V	0.029 V
100 V	100 V	20 kHz	100.000 V	-0.042 V	0.082 V
100 V	100 V	50 kHz	100.000 V	-0.042 V	0.084 V
100 V	100 V	100 kHz	100.00 V	-0.04 V	0.15 V
1000 V	100 V	20 Hz	100.000 V	0.000 V	0.017 V
1000 V	100 V	50 Hz	100.000 V	-0.003 V	0.012 V
1000 V	100 V	1 kHz	100.000 V	-0.003 V	0.012 V
1000 V	500 V	50 Hz	500.000 V	0.071 V	0.076 V
1000 V	500 V	1 kHz	500.000 V	0.071 V	0.076 V
1000 V	900 V	50 Hz	900.00 V	0.11 V	0.13 V
1000 V	900 V	1 kHz	900.00 V	0.11 V	0.13 V

**Arus AC / AC Current**

<b>Rentang</b>	<b>Titik Ukur</b>	<b>Frekuensi</b>	<b>Pembacaan Alat</b>	<b>Koreksi</b>	<b>Ketidakpastian</b>
<i>Range</i>	<i>Measurement Point</i>	<i>Frequency</i>	<i>Instrument Reading</i>	<i>Correction</i>	<i>Uncertainty</i>
100 $\mu$ A	10 $\mu$ A	20 Hz	10.00 $\mu$ A	0.00 $\mu$ A	0.12 $\mu$ A
100 $\mu$ A	10 $\mu$ A	50 Hz	10.00 $\mu$ A	0.00 $\mu$ A	0.12 $\mu$ A
100 $\mu$ A	10 $\mu$ A	1 kHz	10.00 $\mu$ A	0.00 $\mu$ A	0.12 $\mu$ A
100 $\mu$ A	100 $\mu$ A	20 Hz	100.00 $\mu$ A	0.00 $\mu$ A	0.13 $\mu$ A
100 $\mu$ A	100 $\mu$ A	50 Hz	100.00 $\mu$ A	0.00 $\mu$ A	0.13 $\mu$ A
100 $\mu$ A	100 $\mu$ A	1 kHz	100.00 $\mu$ A	0.00 $\mu$ A	0.13 $\mu$ A
1 mA	0.1 mA	20 Hz	0.10000 mA	0.00000 mA	0.00013 mA
1 mA	0.1 mA	50 Hz	0.10000 mA	0.00000 mA	0.00013 mA
1 mA	0.1 mA	1 kHz	0.10000 mA	0.00000 mA	0.00013 mA
1 mA	1 mA	20 Hz	1.00000 mA	0.00009 mA	0.00058 mA
1 mA	1 mA	50 Hz	1.00000 mA	0.00009 mA	0.00056 mA
1 mA	1 mA	1 kHz	1.00000 mA	0.00009 mA	0.00069 mA
1 mA	1 mA	5 kHz	1.0000 mA	0.0001 mA	0.0023 mA
1 mA	1 mA	10 kHz	1.0000 mA	-0.0002 mA	0.0023 mA
10 mA	1 mA	20 Hz	1.00000 mA	0.00009 mA	0.00058 mA
10 mA	1 mA	50 Hz	1.00000 mA	0.00009 mA	0.00056 mA
10 mA	1 mA	1 kHz	1.00000 mA	0.00009 mA	0.00069 mA
10 mA	1 mA	5 kHz	1.0000 mA	0.0001 mA	0.0023 mA
10 mA	1 mA	10 kHz	1.0000 mA	-0.0002 mA	0.0023 mA
10 mA	5 mA	20 Hz	5.0000 mA	0.0007 mA	0.0042 mA

**Arus AC / AC Current**

<b>Rentang</b> <i>Range</i>	<b>Titik Ukur</b> <i>Measurement Point</i>	<b>Frekuensi</b> <i>Frequency</i>	<b>Pembacaan Alat</b> <i>Instrument Reading</i>	<b>Koreksi</b> <i>Correction</i>	<b>Ketidakpastian</b> <i>Uncertainty</i>
10 mA	5 mA	50 Hz	5.0000 mA	0.0003 mA	0.0041 mA
10 mA	5 mA	1 kHz	5.0000 mA	0.0003 mA	0.0045 mA
10 mA	5 mA	5 kHz	5.000 mA	0.001 mA	0.013 mA
10 mA	5 mA	10 kHz	5.000 mA	0.000 mA	0.013 mA
10 mA	10 mA	20 Hz	10.0000 mA	0.0011 mA	0.0058 mA
10 mA	10 mA	50 Hz	10.0000 mA	0.0007 mA	0.0056 mA
10 mA	10 mA	1 kHz	10.0000 mA	0.0007 mA	0.0063 mA
10 mA	10 mA	5 kHz	10.000 mA	0.001 mA	0.020 mA
10 mA	10 mA	10 kHz	10.000 mA	0.000 mA	0.020 mA
100 mA	10 mA	20 Hz	10.0000 mA	0.0011 mA	0.0058 mA
100 mA	10 mA	50 Hz	10.0000 mA	0.0007 mA	0.0056 mA
100 mA	10 mA	1 kHz	10.0000 mA	0.0007 mA	0.0063 mA
100 mA	10 mA	5 kHz	10.000 mA	0.001 mA	0.020 mA
100 mA	10 mA	10 kHz	10.000 mA	0.000 mA	0.020 mA
100 mA	100 mA	20 Hz	100.000 mA	0.007 mA	0.058 mA
100 mA	100 mA	50 Hz	100.000 mA	0.007 mA	0.055 mA
100 mA	100 mA	1 kHz	100.000 mA	0.007 mA	0.060 mA
100 mA	100 mA	5 kHz	100.00 mA	0.01 mA	0.15 mA
100 mA	100 mA	10 kHz	100.00 mA	0.00 mA	0.15 mA
1 A	0.1 A	20 Hz	0.100000 A	0.000007 A	0.000058 A
1 A	0.1 A	50 Hz	0.100000 A	0.000007 A	0.000056 A
1 A	0.1 A	1 kHz	0.100000 A	0.000007 A	0.000060 A
1 A	0.1 A	5 kHz	0.10000 A	0.00001 A	0.00015 A
1 A	0.1 A	10 kHz	0.10000 A	0.00000 A	0.00015 A
1 A	1 A	20 Hz	1.0000 A	0.0000 A	0.0010 A
1 A	1 A	50 Hz	1.0000 A	0.0000 A	0.0010 A
1 A	1 A	1 kHz	1.0000 A	0.0000 A	0.0011 A
1 A	1 A	5 kHz	1.0000 A	0.0003 A	0.0083 A
1 A	1 A	10 kHz	1.0000 A	0.0012 A	0.0083 A

**Resistansi / Resistance**

<b>Rentang</b> <i>Range</i>	<b>Titik Ukur</b> <i>Measurement Point</i>	<b>Pembacaan Alat</b> <i>Instrument Reading</i>	<b>Koreksi</b> <i>Correction</i>	<b>Ketidakpastian</b> <i>Uncertainty</i>
10 $\Omega$	1 $\Omega$	1.00000 $\Omega$	0.00002 $\Omega$	0.00001 $\Omega$
10 $\Omega$	10 $\Omega$	10.00000 $\Omega$	0.00001 $\Omega$	0.00012 $\Omega$
100 $\Omega$	10 $\Omega$	10.00000 $\Omega$	0.00001 $\Omega$	0.00012 $\Omega$
100 $\Omega$	100 $\Omega$	100.0000 $\Omega$	0.0005 $\Omega$	0.0010 $\Omega$
1 k $\Omega$	0.1 k $\Omega$	0.1000000 k $\Omega$	0.0000005 k $\Omega$	0.0000010 k $\Omega$
1 k $\Omega$	1 k $\Omega$	1.000000 k $\Omega$	0.000057 k $\Omega$	0.000058 k $\Omega$
10 k $\Omega$	1 k $\Omega$	1.000000 k $\Omega$	0.000057 k $\Omega$	0.000058 k $\Omega$
10 k $\Omega$	10 k $\Omega$	10.000000 k $\Omega$	0.000054 k $\Omega$	0.000062 k $\Omega$
100 k $\Omega$	10 k $\Omega$	10.00000 k $\Omega$	0.00005 k $\Omega$	0.00006 k $\Omega$
100 k $\Omega$	100 k $\Omega$	100.0000 k $\Omega$	0.0008 k $\Omega$	0.0011 k $\Omega$
1 M $\Omega$	0.1 M $\Omega$	0.1000000 M $\Omega$	0.0000008 M $\Omega$	0.0000011 M $\Omega$
1 M $\Omega$	1 M $\Omega$	1.000000 M $\Omega$	0.000004 M $\Omega$	0.000015 M $\Omega$
10 M $\Omega$	1 M $\Omega$	1.000000 M $\Omega$	0.000004 M $\Omega$	0.000015 M $\Omega$
10 M $\Omega$	10 M $\Omega$	10.00000 M $\Omega$	0.00008 M $\Omega$	0.00027 M $\Omega$
100 M $\Omega$	10 M $\Omega$	10.00000 M $\Omega$	0.00008 M $\Omega$	0.00027 M $\Omega$
100 M $\Omega$	100 M $\Omega$	100.0000 M $\Omega$	0.0131 M $\Omega$	0.0039 M $\Omega$
1 G $\Omega$	0.1 G $\Omega$	0.1000000 G $\Omega$	0.0000131 G $\Omega$	0.0000039 G $\Omega$
1 G $\Omega$	1 G $\Omega$	1.00000 G $\Omega$	0.00107 G $\Omega$	0.00006 G $\Omega$

**Catatan/Notes**

Hasil kalibrasi ini diperoleh berdasarkan prosedur kalibrasi I.ME.1.03 untuk tegangan DC, I.ME.3.04 untuk arus DC, I.ME.5.05 untuk tegangan AC, I.ME.6.03 untuk arus AC, dan I.ME.2.10 untuk resistansi dengan menggunakan alat standar yang tertelusur ke SI melalui SNSU-BSN. / The calibration result was acquired based on the procedure of I.ME.1.03 for DC voltage, I.ME.3.04 for DC current, I.ME.5.05 for AC voltage, I.ME.6.03 for AC current, and I.ME.2.10 for resistance using standard instruments that is traceable to SI through SNSU-BSN.

Ketidakpastian pengukuran dihitung dengan tingkat kepercayaan tidak kurang dari 95% dan faktor cakupan  $k = 2$ . / *The uncertainty of measurement was calculated with a confidence level not less than 95% and coverage factor of  $k = 2$ .*

Alat standar yang digunakan adalah Multifunction Calibrator Fluke 5730A (SN. 4978506), dan Transconductance Amplifier Clarke Hess 8200 (SN. 117). / *The standard instruments used were Multifunction Calibrator Fluke 5730A (SN. 4978506), and Transconductance Amplifier Clarke Hess 8200 (SN. 117).*

Hasil kalibrasi yang ditandai bintang (\*) tidak tercakup dalam ruang lingkup akreditasi KAN. / *Calibration results marked by asterisk (\*) are not covered by KAN accreditation.*

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