財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

(Certificate No: L1733-260526)

This is to certify that

Measurement Technology Co., Ltd

Calibration Laboratory of Northern Region Service Department

4F, 130, Sec. 3, Keelung Rd., Taipei 106, Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	:	ISO/IEC 17025: 2017; CNS 17025: 2018
Accreditation Number	:	1733
Originally Accredited	:	December 28, 2006
Effective Period	:	December 28, 2024 to December 27, 2027
Accredited Scope	:	Calibration Field, see described in the Appendix

Scan to verify

Yi-Ling Chen
President, Taiwan Accreditation Foundation
May 26, 2026

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix

Accreditation Number : 1733
Laboratory Head : LI, Yueh-Hsun

Vibration & Acoustics

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KB2004 Sound Level Meter	1.Sound Pressure Level/RION/NC-73 2.Pistonphone/RION /NC-72	In-house method: Sound Level Meter Calibration Procedure (Document No.: MT-C-95-006)	94	dB re 20 μPa	94	dB re 20 μPa	(1 kHz)	0.4	dB
			114	dB re 20 μPa	114	dB re 20 μPa	(250 Hz)	0.4	dB
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; HUANG, Chun-Lin									

Mass/Force

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KC1002 balance (On-Site Calibration)	METTLER /1 mg-200 g/F1 SARTORIUS /1 mg-1 kg/F1 CHINA SCALE /2 kg/F1 CHINA SCALE /5 kg-20 kg/F1 CHINA SCALE /50 g-1kg/F1	In-house method: Calibration procedure for electronic balance (1 mg_200 g) (Document No.: MT-C-111-001)	1	mg	50	g	Readability >= 0.00001 g	0.15	mg
		Calibration procedure for electronic balance (200 g_2000 g) (Document No.: MT-C-111-002)	>50	g	200	g	Readability >= 0.00001 g	0.38	mg
			200	g	2	kg	Readability >= 0.001 g	4	mg
		Calibration procedure for electronic balance (2 kg_30 kg) (Document No.: MT-C-111-003)	2	kg	30	kg	Readability >= 0.1 g	0.3	g
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; HUANG, Chun-Lin; LIU, Li-Ming									
KC1004 Platform Scale (On-Site Calibration)	METTLER /1 mg-200 g/F1 SARTORIUS /1 mg-1 kg/F1 CHINA SCALE /2 kg/F1 CHINA SCALE /5 kg-20 kg/F1 CHINA SCALE /50 g-1kg/F1 CHINA SCALE /100 g-10 kg/F1	In-house method: Calibration procedure for electronic scale (0.05kg_150kg) (Document No.: MT-C-111-004)	0.05	kg	150	kg	Readability >= 0.01 kg	0.04	kg
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; HUANG, Chun-Lin; LIU, Li-Ming									

Pressure/Vacuum

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KD1004 Barometer	Pressure Calibrator DHI/PPC3	In-house method: Calibration Procedure for Barometer (Document No.: MT-C-109-008)	820	hPa	1045	hPa		0.21	hPa
Approval Signatory: LI, Yueh-Hsun; LI, Jian-Yi; LIN, Yen-Chiu; LIN, Chin-Hua									
KD1004 Pressure Gauge (Hydraulic Pressure Gauge)	Pressure Calibrator DHI/RPM3	In-house method: Calibration Procedure for Hydraulic Pressure Gauge /Pressure Transducer (Document No.: MT-C-101-012)	49 (0.5)	kPa (kgf/cm^2)	96105 (980)	kPa (kgf/cm^2)		21 (0.21)	kPa (kgf/cm^2)
Approval Signatory: LI, Yueh-Hsun; LI, Jian-Yi; LIN, Yen-Chiu; LIN, Chin-Hua									
KD1004 Pressure Gauge	Pressure Calibrator DHI/PPC2+	In-house method: Pressure Gauge /Pressure Transducer Calibration Procedure (Document No.: MT-C-95-007)	20	kPa	343	kPa	Gauge pressure	0.11	kPa
			>343	kPa	1863	kPa	Gauge pressure	0.33	kPa
			>1863	kPa	2940	kPa	Gauge pressure	0.52	kPa
Approval Signatory: LI, Yueh-Hsun; LI, Jian-Yi; LIN, Yen-Chiu; LIN, Chin-Hua									

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KD1005 Pressure Transducer	Pressure Calibrator DHI/PPC2+	In-house method: Pressure Gauge /Pressure Transducer Calibration Procedure (Document No.: MT-C-95-007)	20	kPa	343	kPa	Gauge pressure	0.07	kPa
			>343	kPa	1863	kPa	Gauge pressure	0.32	kPa
			>1863	kPa	2940	kPa	Gauge pressure	0.49	kPa
Approval Signatory: LI, Yueh-Hsun; LI, Jian-Yi; LIN, Yen-Chiu; LIN, Chin-Hua									
KD1007 Differential Gauge Digital Differential Gauge	Pressure Calibrator DHI/PPC 3	In-house method: Differential Gauge /Digital Differential Gauge Calibration Procedure (Document No.: MT-C-95-074)	0	Pa	10000	Pa		1.1	Pa
Approval Signatory: LI, Yueh-Hsun; LI, Jian-Yi; LIN, Yen-Chiu; LIN, Chin-Hua									
KD2006 Vacuum Gauge	Pressure Calibrator DHI/PPC3	In-house method: Vacuum Gauge /Vacuum Transducer Calibration Procedure (Document No.: MT-C-101-022)	-95	kPa	0	kPa		0.020	kPa
Approval Signatory: LI, Yueh-Hsun; LI, Jian-Yi; LIN, Yen-Chiu; LIN, Chin-Hua									

Temperature/Humidity

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KE1007 Radiation Thermometer	Platinum Resistance Thermometer RKC/REX-D900 WADE/PT100 (4W) Radiation Thermometer OPTEX /VF-1600S Impac /IGA 8 PRO	1.In-house method: Instrument calibration technical for the comparative calibration of the radiation thermometers (25 ℃ to 300 ℃) (Document No.: MT-C-99-012) 2.In-house method: Instrument calibration technical for the comparative calibration of the radiation thermometers (300 ℃ to 1500 ℃) (Document No.: MT-C-112-005) 3.In-house method: Instrument calibration technical for the comparative calibration of the radiation thermometers (800 ℃ to 1500 ℃) (Document No.: MT-C-98-013)	25	℃	≦ 150	℃	ε: 0.95	2.4	℃
			>150	℃	≦ 200	℃	ε: 0.95	2.8	℃
			>200	℃	250	℃	ε: 0.95	3.0	℃
			50	℃	≦ 250	℃	ε: 1.00	2.4	℃
			>250	℃	300	℃	ε: 1.00	2.5	℃
			300	℃	700	℃	ε: 1.0	4.4	℃
			800	℃	1500	℃	ε: 1.0	13	℃
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang; HUANG, Chun-Lin									

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KE1010 Temperature Controlled Chamber (On-Site Calibration)	Hydra Data Bucket FLUKE/2635A (K type)	In-house method: Temperature Chamber Calibration Procedure (Document No.: MT-C-100-004)	-30	℃	300	℃		2.5	℃
Approval Signatory: CHIANG, Tsung-Yuan; LI, Yueh-Hsun; LIN, Chin-Hua; HUANG, Chun-Lin; LIU, Li-Ming									
KE1010 Temperature Controlled Chamber (On-Site Calibration)	MobileCorder YOKOGAWA /MV200 (K type)	In-house method: High Temperature Chamber Calibration Procedure (Document No.: MT-C-108-001)	50	℃	450	℃		3.6	℃
Approval Signatory: CHIANG, Tsung-Yuan; LI, Yueh-Hsun; LIN, Chin-Hua; HUANG, Chun-Lin; LIU, Li-Ming									
KE2001 Hygrometer Hygrograph	Digital Hygrometer VAISALA /HMP233	In-house method: Hygrometer/Hygrograph Calibration Procedure (Document No.: MT-C-95-054)	20	℃	50	℃	40 % to 90 %	1.0	℃
			40	%	90	%	15 ℃ to 50 ℃	2.7	%
Approval Signatory: CHIANG, Tsung-Yuan; LI, Yueh-Hsun; LIN, Chin-Hua; HUANG, Chun-Lin; LIU, Li-Ming									
KE2004 Temperature & Humidity recorder	Digital Hygrometer VAISALA /HMP233	In-house method: Hygrometer/Hygrograph Calibration Procedure (Document No.: MT-C-95-054)	20	℃	50	℃	40 % to 90 %	1.0	℃
			40	%	90	%	20 ℃ to 50 ℃	2.7	%
Approval Signatory: CHIANG, Tsung-Yuan; LI, Yueh-Hsun; LIN, Chin-Hua; HUANG, Chun-Lin; LIU, Li-Ming									

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KE2005 Temp./Humidity Chamber (On-Site Calibration)	Digital Hygrometer VAISALA /HMP233	In-house method: Temperature/Humidity Chamber Calibration Procedure (Document No.: MT-C-100-003)	20	℃	50	℃	40 % to 90 %	2.5	℃
			40	%	90	%	20 ℃ to 50 ℃	3.5	%
Approval Signatory: CHIANG, Tsung-Yuan; LI, Yueh-Hsun; LIN, Chin-Hua; HUANG, Chun-Lin; LIU, Li-Ming									

Electricity

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF1001 DC Voltmeter DCV source (On-Site Calibration)	Selfcal Digital Multimeter FLUKE/8508A Calibrator FLUKE/5730A	In-house method: DC voltage calibration procedure (Document No.: MT-C-104-001)	0.1	mV	<1	mV	DC Volt Source	9.5	mV/V
			1	mV	<10	mV	DC Volt Source	0.95	mV/V
			10	mV	<100	mV	DC Volt Source	95	μV/V
			100	mV	100	mV	DC Volt Source	12	μV/V
			100	mV	1000	V	DC Volt Source	15	μV/V
			1	V	1	V	DC Volt Source	6.0	μV/V
			10	V	10	V	DC Volt Source	6.0	μV/V
			100	V	100	V	DC Volt Source	11	μV/V
			1000	V	1000	V	DC Volt Source	11	μV/V
			0.1	mV	<1	mV	DC Volt Meter	14	mV/V
			1	mV	<10	mV	DC Volt Meter	1.4	mV/V
			10	mV	<100	mV	DC Volt Meter	0.14	mV/V
			100	mV	100	mV	DC Volt Meter	18	μV/V
			100	mV	1000	V	DC Volt Meter	18	μV/V
			1	V	1	V	DC Volt Meter	17	μV/V
			10	V	10	V	DC Volt Meter	8.0	μV/V
			100	V	100	V	DC Volt Meter	16	μV/V

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF1001 DC Voltmeter DCV source (On-Site Calibration)	Selfcal Digital Multimeter FLUKE/8508A Calibrator FLUKE/5730A	In-house method: DC voltage calibration procedure (Document No.: MT-C-104-001)	1000	V	1000	V	DC Volt Meter	15	μV/V
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									
KF1002 DC ampere meter DC ampere source DC Shunt (On-Site Calibration)	Selfcal Digital Multimeter FLUKE/8508A Calibrator FLUKE/5730A Shunt LABS CS-50 /CS-200 Current amplifier VALHALLA /2555A	In-house method: DC current calibration procedure (Document No.: MT-C-104-003) In-house method: DC Current (2 A to 100 A) Calibration Procedure (Document No.: MT-C-104-036)	100	μA	100	μA	DC Current Source	0.033	mA/A
			1	mA	1	mA	DC Current Source	0.031	mA/A
			10	mA	10	mA	DC Current Source	0.035	mA/A
			100	mA	100	mA	DC Current Source	0.078	mA/A
			1	A	1	A	DC Current Source	0.11	mA/A
			100	μA	19	mA	DC Current Source	0.060	mA/A
			>190	mA	2	A	DC Current Source	0.15	mA/A
			2	A	<40	A	DC Current Source	0.25	mA/A
			40	A	100	A	DC Current Source	0.33	mA/A
			100	μA	100	μA	DC Current Meter	0.070	mA/A
			1	mA	1	mA	DC Current Meter	0.045	mA/A
			10	mA	10	mA	DC Current Meter	0.045	mA/A
			100	mA	100	mA	DC Current Meter	0.086	mA/A
			1	A	1	A	DC Current Meter	0.15	mA/A
			100	μA	20	mA	DC Current Meter	0.096	mA/A
			>20	mA	2	A	DC Current Meter	0.18	mA/A
			2	A	<40	A	DC Current Meter	3.0	mA/A
			40	A	100	A	DC Current Meter	1.4	mA/A
			2	A	<40	A	DC Shunt	3.0	mA/A
			40	A	100	A	DC Shunt	1.4	mA/A
			0.1	μA	0.1	μA	DC Current Source	5.8	mA/A
			1	μA	1	μA	DC Current Source	0.65	mA/A
			10	μA	10	μA	DC Current Source	0.15	mA/A

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF1002 DC ampere meter DC ampere source DC Shunt (On-Site Calibration)	Selfcal Digital Multimeter FLUKE/8508A Calibrator FLUKE/5730A Shunt LABS CS-50 /CS-200 Current amplifier VALHALLA /2555A	In-house method: DC current calibration procedure (Document No.: MT-C-104-003) In-house method: DC Current (2 A to 100 A) Calibration Procedure (Document No.: MT-C-104-036)	0.1	μA	<10	μA	DC Current Source	5.8	mA/A
			1	μA	<100	μA	DC Current Source	0.65	mA/A
			10	μA	<150	μA	DC Current Source	0.15	mA/A
			>19	mA	190	mA	DC Current Source	0.091	mA/A
			0.1	μA	0.1	μA	DC Current Meter	35	mA/A
			1	μA	1	μA	DC Current Meter	3.5	mA/A
			10	μA	10	μA	DC Current Meter	0.40	mA/A
			0.1	μA	<10	μA	DC Current Meter	35	mA/A
			1	μA	<100	μA	DC Current Meter	3.5	mA/A
			10	μA	<150	μA	DC Current Meter	0.40	mA/A
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									
KF1011 AC Volt meter AC Volt Source (On-Site Calibration)	Selfcal Digital Multimeter FLUKE/8508A Calibrator FLUKE/5730A	In-house method: AC voltage calibration procedure (Document No.: MT-C-104-002)	100	mV	100	mV	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	0.14	mV/V
			1	V	1	V	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	0.10	mV/V
			10	V	10	V	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	0.12	mV/V
			100	V	100	V	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	0.12	mV/V
			1000	V	1000	V	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	0.19	mV/V
			5	mV	<50	mV	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	1.3	mV/V
			50	mV	1000	V	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	0.19	mV/V
			100	mV	100	mV	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	0.18	mV/V
			1	V	1	V	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	0.12	mV/V

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF1011 AC Volt meter AC Volt Source (On-Site Calibration)	Selfcal Digital Multimeter FLUKE/8508A Calibrator FLUKE/5730A	In-house method: AC voltage calibration procedure (Document No.: MT-C-104-002)	10	V	10	V	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	0.14	mV/V
			100	V	100	V	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	0.14	mV/V
			1000	V	1000	V	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	0.20	mV/V
			5	mV	<50	mV	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	1.5	mV/V
			50	mV	1000	V	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	0.20	mV/V
			1	mV	<10	mV	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	13	mV/V
			10	mV	<100	mV	AC Volt Source (@1 kHz, 60 Hz, 50 Hz)	0.80	mV/V
			1	mV	<10	mV	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	15	mV/V
			10	mV	<100	mV	AC Volt Meter (@1 kHz, 60 Hz, 50 Hz)	0.90	mV/V
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF1012 AC ampere meter AC ampere source AC Shunt (On-Site Calibration)	Selfcal Digital Multimeter FLUKE/8508A Calibrator FLUKE/5730A Shunt LABS CS-50 /CS-200 Current amplifier VALHALLA /2555A	In-house method: AC current calibration procedure (Document No.: MT-C-104-004) In-house method: DC Current (2 A to 100 A) Calibration Procedure (Document No.: MT-C-104-037)	100	µA	100	µA	AC Current Source (@1 kHz, 60 Hz, 50 Hz)	0.35	mA/A
			1	mA	1	mA	AC Current Source (@1 kHz, 60 Hz, 50 Hz)	0.15	mA/A
			10	mA	10	mA	AC Current Source (@1 kHz, 60 Hz, 50 Hz)	0.15	mA/A
			100	mA	100	mA	AC Current Source (@1 kHz, 60 Hz, 50 Hz)	0.18	mA/A
			1	A	1	A	AC Current Source (@1 kHz, 60 Hz, 50 Hz)	0.25	mA/A
			10	µA	<150	µA	AC Current Source (@1 kHz, 60 Hz, 50 Hz)	1.5	mA/A
			100	µA	2	A	AC Current Source (@1 kHz, 60 Hz, 50 Hz)	0.35	mA/A
			2	A	<10	A	AC Current Source (@60 Hz)	1.7	mA/A
			10	A	<40	A	AC Current Source (@60 Hz)	0.51	mA/A
			40	A	100	A	AC Current Source (@60 Hz)	0.70	mA/A
			100	µA	100	µA	AC Current Meter (@1 kHz, 60 Hz, 50 Hz)	0.40	mA/A
			1	mA	1	mA	AC Current Meter (@1 kHz, 60 Hz, 50 Hz)	0.20	mA/A
			10	mA	10	mA	AC Current Meter (@1 kHz, 60 Hz, 50 Hz)	0.20	mA/A
			100	mA	100	mA	AC Current Meter (@1 kHz, 60 Hz, 50 Hz)	0.20	mA/A
			1	A	1	A	AC Current Meter (@1 kHz, 60 Hz, 50 Hz)	0.30	mA/A
			100	µA	<150	µA	AC Current Meter (@1 kHz, 60 Hz, 50 Hz)	2.0	mA/A

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF1012 AC ampere meter AC ampere source AC Shunt (On-Site Calibration)	Selfcal Digital Multimeter FLUKE/8508A Calibrator FLUKE/5730A Shunt LABS CS-50 /CS-200 Current amplifier VALHALLA /2555A	In-house method: AC current calibration procedure (Document No.: MT-C-104-004) In-house method: DC Current (2 A to 100 A) Calibration Procedure (Document No.: MT-C-104-037)	100	μA	2	A	AC Current Meter (@1 kHz, 60 Hz, 50 Hz)	0.40	mA/A
			2	A	<10	A	AC Current Meter (@60 Hz)	19	mA/A
			10	A	<40	A	AC Current Meter (@60 Hz)	7.0	mA/A
			40	A	100	A	AC Current Meter (@60 Hz)	5.5	mA/A
			2	A	<10	A	AC Shunt (@ 60 Hz)	19	mA/A
			10	A	<40	A	AC Shunt (@ 60 Hz)	7.0	mA/A
			40	A	100	A	AC Shunt (@ 60 Hz)	5.5	mA/A
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									
KF1018 Induction Type Current meter	Multifunction Calibrator FLUKE/5730A Current Calibrator Valhalla/2555A Current Coil FLUKE/1kA	In-house method: CLAMP-METER (1 kA) MEASURING SYSTEM CALIBRATION PROCEDURE (Document No.: MT-C-104-039)	1	A	30	A	DC Clamp Meter	6.0	mA/A
			>30	A	1000	A	DC Clamp Meter	26	mA/A
			1	A	30	A	AC Clamp Meter (@ 60 Hz)	36	mA/A
			>30	A	90	A	AC Clamp Meter (@ 60 Hz)	62	mA/A
			>90	A	1000	A	AC Clamp Meter (@ 60 Hz)	29	mA/A
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF2001 THREE PHASE POWER METER /SOURCE (On-Site Calibration)	Power Calibrator CALMET/C300 Power Analyzer FLUKE /NORMA 4000	In-house method: AC POWER MEASURING SYSTEM CALIBRATION PROCEDURE (Document No.: MT-C-104-013)	3.3	W	<165	W	Power Meter 110 V/0.01 A to 0.5 A @ Freq: 50 Hz/60 Hz,, PF: 1.0	2.5	mW/W
			165	W	6600	W	Power Meter 110 V/0.5 A to 20 A @ Freq: 50 Hz/60 Hz,, PF: 1.0	0.51	mW/W
			6.6	W	<330	W	Power Meter 220 V/0.01 A to 0.5 A @ Freq: 50 Hz/60 Hz,, PF: 1.0	2.5	mW/W
			330	W	13200	W	Power Meter 220 V/0.5 A to 20 A @ Freq: 50 Hz/60 Hz,, PF: 1.0	0.51	mW/W
			3.3	W	6600	W	Power Source 110 V/0.01 A to 20 A @ Freq: 60 Hz, PF: 1.0	3.0	mW/W
			6.6	W	13200	W	Power Source 220 V/0.01 A to 20 A @ Freq: 60 Hz, PF: 1.0	3.0	mW/W
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									
KF2001 SINGLE PHASE POWER METER /SOURCE (On-Site Calibration)	Power Calibrator CALMET/C300 Power Analyzer FLUKE /NORMA 4000	In-house method: AC POWER MEASURING SYSTEM CALIBRATION PROCEDURE (Document No.: MT-C-104-013)	1.1	W	<55	W	Power Meter 110 V/0.01 A to 0.5 A @ Freq: 50 Hz/60 Hz, PF: 1.0	1.2	mW/W
			≧ 55	W	2200	W	Power Meter 110 V/0.5 A to 20 A @ Freq: 50 Hz/60 Hz, PF: 1.0	0.45	mW/W
			2.2	W	<110	W	Power Meter 220 V/0.01 A to 0.5 A @ Freq: 50 Hz/60 Hz, PF: 1.0	1.2	mW/W
			≧ 110	W	4400	W	Power Meter 220 V/0.5 A to 20 A @ Freq: 50 Hz/60 Hz, PF: 1.0	0.45	mW/W
			1.1	W	2200	W	Power Source 110 V/0.01 A to 20 A @ Freq: 60 Hz, PF: 1.0	2.8	mW/W
			2.2	W	4400	W	Power Source 220 V/0.01 A to 20 A @ Freq: 60 Hz, PF: 1.0	2.8	mW/W
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF3001 Resistor /Decimal resistance box Ohmmeter (on-site calibration included)	Selfcal digital multimeter FLUKE/8508A Standard Resistor Guildline/9330 IET/SRX-100M IET/SRC-1G IET/SRC-10G YEW/2792 Decimal Resistance Box ESI/RS925C BIDDLE /72-6346-1	In-house method: resistance calibration procedure (Document No.: MT-C-104-005)	1	mΩ	1	mΩ	Resistor	4.5	mΩ/Ω
			10	mΩ	10	mΩ	Resistor	0.50	mΩ/Ω
			100	mΩ	100	mΩ	Resistor	65	μΩ/Ω
			1	Ω	1	Ω	Resistor	30	μΩ/Ω
			10	Ω	10	Ω	Resistor	20	μΩ/Ω
			100	Ω	100	Ω	Resistor	15	μΩ/Ω
			1	kΩ	1	kΩ	Resistor	15	μΩ/Ω
			10	kΩ	10	kΩ	Resistor	15	μΩ/Ω
			100	kΩ	100	kΩ	Resistor	15	μΩ/Ω
			1	MΩ	1	MΩ	Resistor	25	μΩ/Ω
			10	MΩ	10	MΩ	Resistor	30	μΩ/Ω
			100	MΩ	100	MΩ	Resistor	0.21	mΩ/Ω
			1	GΩ	1	GΩ	Resistor	0.35	mΩ/Ω
			10	GΩ	10	GΩ	Resistor	3.5	mΩ/Ω
			0.001	Ω	<0.1	Ω	Resistor	4.5	mΩ/Ω
			0.1	Ω	<100	Ω	Resistor	65	μΩ/Ω
			100	Ω	10	MΩ	Resistor	35	μΩ/Ω
			>10	MΩ	100	MΩ	Resistor	0.21	mΩ/Ω
			1	mΩ	1	mΩ	Resistance Meter	4.7	mΩ/Ω
			10	mΩ	10	mΩ	Resistance Meter	0.51	mΩ/Ω
			100	mΩ	100	mΩ	Resistance Meter	0.12	mΩ/Ω
			1	Ω	1	Ω	Resistance Meter	35	μΩ/Ω
			10	Ω	10	Ω	Resistance Meter	25	μΩ/Ω
			100	Ω	100	Ω	Resistance Meter	25	μΩ/Ω
			1	kΩ	1	kΩ	Resistance Meter	25	μΩ/Ω
			10	kΩ	10	kΩ	Resistance Meter	25	μΩ/Ω
			100	kΩ	100	kΩ	Resistance Meter	25	μΩ/Ω
			1	MΩ	1	MΩ	Resistance Meter	50	μΩ/Ω
			10	MΩ	10	MΩ	Resistance Meter	65	μΩ/Ω
			100	MΩ	100	MΩ	Resistance Meter	0.26	mΩ/Ω
			1	GΩ	1	GΩ	Resistance Meter	0.85	mΩ/Ω

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KF3001 Resistor /Decimal resistance box Ohmmeter (on-site calibration included)	Selfcal digital multimeter FLUKE/8508A Standard Resistor Guildline/9330 IET/SRX-100M IET/SRC-1G IET/SRC-10G YEW/2792 Decimal Resistance Box ESI/RS925C BIDDLE /72-6346-1	In-house method: resistance calibration procedure (Document No.: MT-C-104-005)	10	GΩ	10	GΩ	Resistance Meter	4.0	mΩ/Ω
			0.1	Ω	<1	Ω	Resistance Meter	0.90	mΩ/Ω
			1	Ω	<100	Ω	Resistance Meter	0.25	mΩ/Ω
			100	Ω	1	MΩ	Resistance Meter	50	μΩ/Ω
			>1	MΩ	100	MΩ	Resistance Meter	0.50	mΩ/Ω
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									
KF3001 Clamp-on Resistance meter (on-site calibration included)	Decimal Resistance Box ESI/RS925C	In-house method: Clamp-on Resistance calibration procedure (Document No.: MT-C-109-007)	0.1	Ω	<1	Ω	Clamp-on Resistance Meter	0.11	Ω/Ω
			1	Ω	<100	Ω	Clamp-on Resistance Meter	11	mΩ/Ω
			100	Ω	1200	Ω	Clamp-on Resistance Meter	25	mΩ/Ω
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; KAO, Chi-Hsiang									

Flow

calibration items	working standard	calibration method	measurand level or range				measurement conditions /independent variable	smallest uncertainty	
	brand /model	document name /no.	minimum value	units	maximum value	units	explanation	value	units
KH3001 Hot wire anemometer, Pitot tube anemometer	Hot wire anemometer TSI/8465-300-1 Pitot tube anemometer Setra/276	In-house method: Anemometer Calibration Procedure (Document No.: MT-C-111-006)	0.2	m/s	<1	m/s		0.15	m/s
			1	m/s	<5	m/s		0.43	m/s
			5	m/s	<10	m/s		0.45	m/s
			10	m/s	30	m/s		0.70	m/s
Approval Signatory: LI, Yueh-Hsun; LIN, Chin-Hua; LIU, Li-Ming									

Note: Smallest uncertainty represents an expanded uncertainty using a coverage factor approximately 95 % level of confidence.
(Null Below)