Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
DC voltage			
Sources, Fixed Values [1]	100 mV 1 V 1.018 V 10 V 100 V 1000 V	$6.4 \cdot 10^{-6} \cdot U$ $2.5 \cdot 10^{-6} \cdot U$ $2.5 \cdot 10^{-6} \cdot U$ $2.4 \cdot 10^{-6} \cdot U$ $2.4 \cdot 10^{-6} \cdot U$ $2.6 \cdot 10^{-6} \cdot U$	In-house method JNMI SMP 48 **[Issue No.:(1) & Revision No. :(5); Date: 9/3/2017] - Calibration of DC Voltage Source** U= measured value Calibration using 732 B DC Reference Standard and 752 A Divider
DC voltage Measuring Instruments	1 mV to 2.2 mV >2.2 mV to 10 mV >10 mV to 220 mV >220 mV to 2.2 V >2.2 V to 11 V > 11 V to 22 V >22 V to 220 V >220 V to 1000 V	2 µV 2 µV $2.4 \cdot 10^{-6} \cdot U + 5.8$ µV $4.0 \cdot 10^{-6} \cdot U + 5.2$ µV $4.2 \cdot 10^{-6} \cdot U + 3.8$ µV $4.3 \cdot 10^{-6} \cdot U + 4$ µV $5.6 \cdot 10^{-6} \cdot U + 38$ µV $7.0 \cdot 10^{-6} \cdot U + 0.38$ mV	In-house method JNMI SMP 02 [Issue No.:(1) & **Revision No. :(5); Date: 15/06/2017] - Calibration of DC Voltage Meter** Using Multi-function Calibrator
	1 mV to <10 mV	2.5 µV	JNMISMP(49), Issue (1), **Rev, (2) Date: 2007** Using DMM Agilent 34420A
DC Voltage sources	10 mV to <0.2 V 0.2 V to <2 V 2 V to <20 V 20 V to <200 V 200 V to 1000 V	9 µV $4.1 \cdot 10^{-6} \cdot U + 7.6$ µV $5.0 \cdot 10^{-6} \cdot U + 7.7$ µV $7.2 \cdot 10^{-6} \cdot U + 55$ µV $8.4 \cdot 10^{-6} \cdot U + 0.6$ mV	In-house method JNMI SMP 01 [Issue No.:(1) & Revision No.:(4); Date: 15/06/2014] - Calibration of DC Current Source Using DMM Fluke 8508A

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
DC Current			
Measuring Instruments	10 µA to < 0.22 mA 0.22 mA to 2.2 mA >2.2 mA to 22 mA >22 mA to 220 mA >220 mA to 2.2 A >2.2 A to 11 A	$42 \cdot 10^{-6}$. I + 6 nA $38 \cdot 10^{-6}$. I + 7 nA $40 \cdot 10^{-6}$. I + 40 nA $55 \cdot 10^{-6}$. I + 0.7 µA $0.1 \cdot 10^{-3}$. I + 10 µA $0.39 \cdot 10^{-3}$. I + 0.46 mA	In-house method JNMI SMP 04 [Issue No.:(1) **& Revision No.:(5); Date: 15/06/2017]** - Calibration of DC Current Meter
Sources, Fixed Values	50 µA 100 µA 200 µA 500 µA 1 mA 2 mA 5 mA 10 mA 20 mA 50 mA 100 mA 200 mA 500 mA 1 A 2 A 3 A 5 A 8 A 10 A	$8 \cdot 10^{-6} \cdot I$ $10 \cdot 10^{-6} \cdot I$ $9 \cdot 10^{-6} \cdot I$ $7 \cdot 10^{-6} \cdot I$ $6 \cdot 10^{-6} \cdot I$ $12 \cdot 10^{-6} \cdot I$ $10 \cdot 10^{-6} \cdot I$ $10 \cdot 10^{-6} \cdot I$ $15 \cdot 10^{-6} \cdot I$ $22 \cdot 10^{-6} \cdot I$ $18 \cdot 10^{-6} \cdot I$ $31 \cdot 10^{-6} \cdot I$ $15 \cdot 10^{-6} \cdot I$ $28 \cdot 10^{-6} \cdot I$ $59 \cdot 10^{-6} \cdot I$ $55 \cdot 10^{-6} \cdot I$ $52 \cdot 10^{-6} \cdot I$ $0.15 \cdot 10^{-3} \cdot I$ $0.15 \cdot 10^{-3} \cdot I$	In-house method JNMI SMP 48 [Issue No.:(1) **& Revision No.:(5); Date: 9/3/2017]** - Calibration of Fluke 5720A, DC Voltage Source, DC Resistance Sources, DC Current Sources, AC Voltage Sources & AC Current Sources I= measured value

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Permanent Calibration

Measurand	*Measuring Range*	*Calibration and measurement Capability (CMC) [a]*	*Calibration Methods/ Standards/ Remarks*
DC Current			
Sources	10 µA to <0.2 mA 0.2 mA to <2 mA 2 mA to < 20 mA 20 mA to 0.2 A 2.2 A to 2 A 2 A to 20 A	$44 \cdot 10^{-6} \cdot I + 6$ nA $40 \cdot 10^{-6} \cdot I + 8$ nA $42 \cdot 10^{-6} \cdot I + 60$ nA $66 \cdot 10^{-6} \cdot I + 1$ µA $0.2 \cdot 10^{-3} \cdot I + 19$ µA $0.55 \cdot 10^{-3} \cdot I + 0.61$ µA	In-house method JNMI SMP 03 [Issue No.:(1) & Revision No.:(4); Date: 15/06/2014] - Calibration of DC Current Source I=measured value
Clamp meters	20 A to <150 A 150 A to 1000 A	$6 \cdot 10^{-3} \cdot I + 0.2$ A $6 \cdot 10^{-3} \cdot I + 0.6$ A	I: Measured Value Using 50-turns-coil, Voltage Source 5520A JNMISMP64, Issue (1), Rev. (1)
DC Resistance			

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Measuring Instruments	1 Ω 1.9 Ω 10 Ω 100 Ω 1 k Ω 10 kΩ 19 kΩ 100 kΩ 1 MΩ 10 MΩ 19 MΩ 100 MΩ	$12 \cdot 10^{-6} \cdot R$ $11 \cdot 10^{-6} \cdot R$ $16 \cdot 10^{-6} \cdot R$ $18 \cdot 10^{-6} \cdot R$ $8 \cdot 10^{-6} \cdot R$ $2.5 \cdot 10^{-6} \cdot R$ $3.4 \cdot 10^{-6} \cdot R$ $4.6 \cdot 10^{-6} \cdot R$ $16 \cdot 10^{-6} \cdot R$ $0.13 \cdot 10^{-3} \cdot R$ $0.14 \cdot 10^{-3} \cdot R$ $0.59 \cdot 10^{-3} \cdot R$	In-house method JNMI SMP 06 [Issue No.:(1) & Revision No.:(4); Date: 15/06/2014] - Calibration of DC Resistance Meters R= measured value Using 5720 A Multi-function calibrator

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC) [a]***	***Calibration Methods/ Standards/ Remarks***
DC Resistance			
Measuring Instruments	1 GΩ 10GΩ	$18 \cdot 10^{-3} \cdot R$ $31 \cdot 10^{-3} \cdot R$	JNMISMP(06), Issue (1), Rev, (4) Date:15/6/2014 Using Decade Box
Resistors, Fixed Values	0.001 0.01 0.1	$0.44 \cdot 10^{-3} \cdot R$ $0.44 \cdot 10^{-3} \cdot R$ $0.1 \cdot 10^{-3} \cdot R$	In-house method JNMI SMP 84 [Issue No.:(1) & Revision No.:(1); Date: 1/9/2015] -

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

	0.1 Ω 1 Ω 1.9 Ω 10 Ω 100 Ω 1 kΩ 10 kΩ 19 kΩ 100 kΩ 1 MΩ 10 MΩ 19 MΩ 100 MΩ	$45 \cdot 10^{-6} \cdot R$ $9 \cdot 10^{-6} \cdot R$ $8 \cdot 10^{-6} \cdot R$ $16 \cdot 10^{-6} \cdot R$ $9 \cdot 10^{-6} \cdot R$ $4 \cdot 10^{-6} \cdot R$ $2.5 \cdot 10^{-6} \cdot R$ $2.4 \cdot 10^{-6} \cdot R$ $4 \cdot 10^{-6} \cdot R$ $12 \cdot 10^{-6} \cdot R$ $0.11 \cdot 10^{-3} \cdot R$ $0.13 \cdot 10^{-3} \cdot R$ $0.62 \cdot 10^{-3} \cdot R$	In-house method JNMI SMP 48 [Issue No.:(1) **& Revision No.:(5); Date: 9/3/2017]** - Calibration of Fluke 5720A, DC Voltage Source, DC Resistance Sources, DC Current Sources, AC Voltage Sources & AC Current Sources. R= measured value Using 742 A Reference Resistors & 8508 A Reference Multimeter
Resistors	0.1 Ω to <2 Ω 2.0 Ω to <20 Ω 20 Ω to <0.2 kΩ 0.2 kΩ to <2 kΩ 2 kΩ to <20 kΩ 20 kΩ to <0.2MΩ 0.2 MΩ to < 2 MΩ 2 MΩ to <20 MΩ 20MΩ to < 0.2GΩ 0.2GΩ to < 2 GΩ 2 GΩ to < 20 GΩ	$17 \cdot 10^{-6} \cdot R + 13\ \mu\Omega$ $19 \cdot 10^{-6} \cdot R + 10\ \mu\Omega$ $20 \cdot 10^{-6} \cdot R + 23\ \mu\Omega$ $11 \cdot 10^{-6} \cdot R + 0.38\ m\Omega$ $8.3 \cdot 10^{-6} \cdot R + 4.7 m\Omega$ $8.8 \cdot 10^{-6} \cdot R + 44\ m\Omega$ $18 \cdot 10^{-3} \cdot R + 0.6\ \Omega$ $0.14 \cdot 10^{-3} \cdot R + 30\ \Omega$ $0.58 \cdot 10^{-3} \cdot R + 4.7\ k\Omega$ $18 \cdot 10^{-3} \cdot R + 2.4\ k\Omega$ $3 \cdot 10^{-3} \cdot R + 6.8\ M\Omega$	- In-house method JNMI SMP 05 [Issue No.:(1) & Revision No.:(4); Date: 15/06/2014] – Calibration of DC Resistance Sources -Using HP Meter

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC) [a]***	***Calibration Methods/ Standards/ Remarks***
AC voltage			

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Sources, fixed values	0.1 V 1 V 10 V 100 V 1000 V	$25 \cdot 10^{-6} \cdot U$ $24 \cdot 10^{-6} \cdot U$ $25 \cdot 10^{-6} \cdot U$ $27 \cdot 10^{-6} \cdot U$ $39 \cdot 10^{-6} \cdot U$	- In-house method JNMI SMP 48 [**Issue No.:(1) & Revision No.:(5); Date:9/3/2017]** - Calibration of Fluke 5720A, DC Voltage Source, DC Resistance Sources, DC Current Sources, AC Voltage Sources & AC Current Sources - Using DC Voltage Function of the 5720 A Calibrator, 792 AC/DC Transfer Standard
Measuring Instruments	22 mV to 220 mV >220 mV to 2.2 V >2.2 V to 22 V >22 V to 220 V >220 V to 1000 V	$67 \cdot 10^{-6} \cdot U$ + 13 µV $50 \cdot 10^{-6} \cdot U$ + 12 µV $52 \cdot 10^{-6} \cdot U$ + 46 µV $59 \cdot 10^{-6} \cdot U$ + 0.56 mV $80 \cdot 10^{-6} \cdot U$ + 3.2 mV	- In-house method JNMI SMP 08 [Issue No.:(1) & **Revision No.:(5); Date: 15/06/2017]** - Calibration of AC Voltage Meter U= measured value
Sources	10 mV to <0.2V 0.2 mV to <2 V 2 V to <20 V 20 V to <200 V 200 V to 1000 V	$11 \cdot 10^{-3} \cdot U$ + 18 µV $0.11 \cdot 10^{-3} \cdot U$ + 26 µV $0.10 \cdot 10^{-3} \cdot U$ + 0.20 mV $0.11 \cdot 10^{-3} \cdot U$ + 2 mV $0.13 \cdot 10^{-3} \cdot U$ + 19 mV	- In-house method JNMI SMP 07 [Issue No.:(1) & Revision No.:(4); Date: 15/06/2014] - Calibration of AC Voltage Sources U= measured value

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC) [a]***	***Calibration Methods/ Standards/ Remarks***
AC current			

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Sources	50 mA 0.1 A 0.2 A 0.5 A 1 A 2 A 3 A 5 A 10 A	$29 \cdot 10^{-6} \cdot I$ $26 \cdot 10^{-6} \cdot I$ $35 \cdot 10^{-6} \cdot I$ $26 \cdot 10^{-6} \cdot I$ $33 \cdot 10^{-6} \cdot I$ $67 \cdot 10^{-6} \cdot I$ $62 \cdot 10^{-6} \cdot I$ $61 \cdot 10^{-6} \cdot I$ $0.16 \cdot 10^{-3} \cdot I$	- In-house method JNMI SMP 48 [Issue No.:(1) & **Revision No.:(5); Date: 9/3/2017** - Calibration of Fluke 5720A, DC Voltage Source, DC Resistance Sources, DC Current Sources, AC Voltage Sources & AC Current Sources. - Using DC Current Function of the 5720 A & AC/DC Transfer Std. - Using Y5020 Shunt
Measuring Instruments	>22 mA to 220 mA >220 mA to 2.2 A >2.2 A to 5 A > 5 A to 11 A	$0.13 \cdot 10^{-3} \cdot I + 2.5\ \mu A$ $0.27 \cdot 10^{-3} \cdot I + 34\ \mu A$ $0.47 \cdot 10^{-3} \cdot I + 0.17$ mA $0.49 \cdot 10^{-3} \cdot I + 0.16$ mA 40 Hz to 1 kHz	- In-house method JNMI SMP 10 [Issue No.:(1) **& Revision No.:(5); Date: 15/06/2017]** - Calibration of AC Current Meter I= measured value
Sources	10 mA to <0. 2 A 0.2A to <2A 2 A to 20 A	$0.28 \cdot 10^{-3} \cdot I + 20\ \mu A$ $0.66 \cdot 10^{-3} \cdot I + 0.2$mA $0.95 \cdot 10^{-3} \cdot I + 1.9$ mA 40 Hz to 1 kHz	- In-house method JNMI SMP 09 [Issue No.:(1) & Revision No.:(4); Date: 15/06/2014] - Calibration of AC Current Source I= measured value

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

AC current			
Clamp meters	20 A to <150 A 150 A to 1000 A	$3 . 10^{-3} \cdot I + 0.1$ A $4 . 10^{-3} \cdot I + 0.5$ A	I: Measured Value 45 Hz to 65 Hz Using 50-turns-coil, Voltage Source 5520A JNMISMP65, Issue (1), Rev. (1) Calibration of Toroidal Clamp Meters
	20 A to <150 A 150 A to 1000 A	$7 . 10^{-3} \cdot I + 0.4$ A $7 . 10^{-3} \cdot I + 1.2$ A	45 Hz to 65 Hz I: Measured Value Using 50-turns-coil, Voltage Source 5520A JNMISMP65, Issue (1), Rev. (1) Calibration of Non-Toroidal Clamp Meters
Length			
Micrometer for External Measurements	0 mm to 250 mm	3 µm + 10 · 10-6· ℓ	JNMISMP(36), Issue (1), Rev, (4) Date:15/2/2018 VDI/VDE/DGQ 2618 Part 10.1 ℓ: is measured length
Vernier Caliper for external, internal, and depth measurements (Including digital and dial Indicators)	0 mm to 400 mm > 400 mm to 500 mm	30 µm + 30·10-6· ℓ 60 µm + 30·10-6· ℓ	JNMISMP(39), Issue (1), Rev, (5) Date:15/2/2018 VDI/VDE/DGQ 2618 Part 9.1 ℓ: is measured length

Permanent Calibration

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Length			
Dial Gauges	0 mm to 100 mm	6 µm + $10 \cdot 10^{-6} \cdot \ell$	JNMISMP(32), Issue (1), **Rev, (4) Date:15/2/2018** VDI/VDE/DGQ 2618 Part 11.1 ℓ :is measured length
Gauge Blocks made of Steel or Ceramics according to ISO 3650	0.5 mm to 100 mm	For the central length 0.08 µm + $0.8 \cdot 10^{-6} \cdot \ell$ l is the length of the gauge block For the deviations f_o and f_u from the central length 0.05 µm	JNMISMP(35), Issue (1), **Rev, (5) Date: 2016** VDI/VDE/DGQ 2618 Part 3.1 Measurement of the Deviation of the central length lc from the nominal length ln by comparison method. Standard and gauge block under test must be of same nominal length and made of the same material. Measurement of the deviations fo and fu from the central length lc by 5 point comparison method. Quality of the measuring faces according to the commitments in the Laboratory Quality Manual and the Calibration Procedure
Gauge Blocks made of Tungsten Carbide according to ISO 3650	0.5 mm to 100 mm	For the central length 0.08 µm + $0.5.10^{-6}$.l l is the length of the gauge block For the deviations fo and fu from the central length 0.05 µm	

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC) [a]***	***Calibration Methods/ Standards/ Remarks***
Length (Rulers and Linear Scales)			
Rulers and Tape Measures	Up to 10 m	0.5 mm	JNMISMP(46), Issue **(1), Rev, (4) Date:15/2/2018**
Linear Scale	Up to 2 m	0.16 mm	JNMISMP(35), Issue (1), **Rev, (5) Date:2016**
Calibration Device for Extensometers	(0 to 25) mm	0.25 µm	JNMISMP(88), Issue (1), Rev, (1) Date:14/10/2015
Mass			
Conventional Mass	1 mg, 2mg, 5 mg 10 mg, 20 mg 50 mg 100 mg 200 mg 500 mg 1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g 500 g 1 kg 2 kg 5 kg 10 kg	0.003 mg 0.003 mg 0.004 mg 0.005 mg 0.006 mg 0.008 mg 0.010 mg 0.012 mg 0.016 mg 0.020 mg 0.025 mg 0.030 mg 0.050 mg 0.10 mg 0.25 mg 0.5 mg 1.0 mg 2.5 mg 5 mg	- In House Method JNMISMP43 [Issue No.:(1) & Revision No.:(3); Date: May/2010] - In House Method JNMISMP44 [Issue No.:(1) & Revision No.:(4); Date: May/2011] Class E2

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

	20 kg 50 kg	30 mg 80 mg	OIML recommendation R 111 Class F1

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Mass			
Conventional Mass	1 mg to 100 mg > 100 mg to 200 mg > 200 mg to 500 mg > 500 mg to 1 g > 1 g to 2 g > 2 g to 5 g > 5 g to 10 g > 10 g to 20 g > 20 g to 50 g > 50 g to 100 g > 100 g to 10 kg > 10 kg to 50 kg	0.005 mg 0.006 mg 0.008 mg 0.010 mg 0.012 mg 0.015 mg 0.020 mg 0.025 mg 0.030 mg 0.05 mg $5 \cdot 10^{-7} \cdot mc$ $1.6 \cdot 10^{-6} \cdot mc$	For free nominal values mc: conventional mass

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Temperature			
Temperature Fixed point cells	0.01 °C	5 mK	JNMISMP(58), Issue (1), Rev, (2) Date:22/7/2015 Comparison with TPW
Resistance thermometers, direct-reading thermometers and data loggers with external sensors	- 85 °C to 50 °C	30 mK	JNMISMP(59), Issue (1), Rev, (2) Date:22/7/2015 Comparison with standard platinum resistance thermometer Heat Sources used are Ethanol Bath, Oil Bath, Salt Bath, Dry Block Calibrators, three Zone Furnace, as well as a TPW and a Gallium Cell
	>-10 °C to 100 °C	40 mK	
	> 95 °C to 250 °C	40 mK	
	180 °C to 400 °C	50 mK	
	0.01 °C	5 mK	
	29.7646 °C	12 mK	
	-25 °C to 25 °C	0.2 K	
	> 25 °C to 150 °C	0.12 K	
	> 150 °C to 400°C	0.4 K	
	100 °C to 400 °C	0.5 K	
Liquid in glass thermometers	- 85 °C to 50 °C	50 mK	JNMISMP(62),Issue (1), Rev,(3) Date:15/2/2018 Comparison with standard platinum resistance thermometer Heat Sources used are Ethanol Bath, Oil Bath and Dry Block Calibrators.
	>-10 °C to 100 °C	50 mK	
	> 95 °C to 250 °C	50 mK	
	-25 °C to 25 °C	0.2 K	
	> 25 °C to 150 °C	0.12 K	
	> 150 °C to 400 °C	0.4 K	
	> 400 °C to 660°C	1.5 K	

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Temperature			
Noble metal thermocouples	- 85 °C to 50 °C	0.5 K	JNMISMP(60), Issue (1), Rev, (3) Date:15/2/2018 Comparison with standard platinum resistance thermometer Heat Sources used are Ethanol Bath, Oil Bath, and Dry Block Calibrators
	>-10 °C to 100 °C	0.4 K	
	> 95 °C to 250 °C	0.7 K	
	180 °C to 400 °C	0.8 K	
	50 °C to 420°C	0.5 K	
	> 400 °C to 660 °C	1.5 K	
	> 400 °C to 700 °C	2 K	Comparison with noble metal thermocouples Heat Sources are Dry Block Calibrators and Three Zone Furnace
	350 °C to 1100 °C	3 K	
	350 °C to 1100 °C	2.5 K	
Base metal thermocouples with direct reading devices (internal CJC)	-85 °C to 50 °C	0.15 K	JNMISMP(61), Issue (1), Rev, (3) Date:15/2/2018 Comparison with standard platinum resistance thermometer Heat Sources used are Ethanol Bath, Oil Bath, and Dry Block Calibrators
	> 0 °C to 95 °C	0.15 K	
	>95 °C to 250 °C	0.15 K	
	-25 °C to 150 °C	0.25 K	
	> 150 °C to 250°C	0.40 K	
Data loggers with air type sensors	-10°C to <15 °C	0.5 K	JNMISMP(63), Issue (1), Rev, (2) Date:22/7/2015 Comparison with PT-100 Heat Source used is a Climatic Chamber
	15°C to 35 °C	0.3 K	
	>35 °C to 50 °C	0.6 K	
	>50 °C to 70 °C	0.8 K	

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Temperature			
Dry block calibrators	-85 °C to 400 °C	0,25 K	Euramet cg-13, Version 3.0 (02/2015) **JNMISMP90, Issue (1), Rev, (2) Date:15/2/2018 Comparison with SPRTs and Noble Metal TCs**
	>400 °C to 660 °C	4 K	
	>900 °C to 1100 °C	8 K	
Thermocouple simulators	-200 °C to 200 °C	0.7K	Euramet cg-11, Version 2.0 (03/20110 **JNMISMP89, Issue (1), Rev, (1) Date:19/11/2015 Calibration using Multifunction Calibrator, Nano Voltmeter and Reference DMM**
	>200 °C to 500 °C	0.5 K	
	>500 °C to 1200 °C	0.35 K	
RTD simulators	-200 °C to 400 °C	0.05 K	
	-400 °C to 800 °C	0.08 K	
Thermocouple indicators	-200 °C to 200 °C	0.8 K	
	>200 °C to 500 °C	0.6 K	
	>500 °C to 1200 °C	0.8 K	
RTD indicators	-200 °C to 400 °C	0.05 K	
	>400 °C to 800 °C	0.3 K	
Base metal thermocouples	-85°C to 0 °C	0.6 K	JNMISMP(61), Issue (1), **Rev.(3) Date:15/2/2018** Calibration using Ethanol bath, Oil bath, Salt bath, Dry block calibrators and 3-zone furnace
	>0 °C to 95 °C	0.5 K	
	>95 °C to 250 °C	0.7K	
	>200 °C to 400 °C	0.8 K	
	50 °C to 420 °C	0.5 K	

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

	>420 °C to 660 °C	2.5 K	Reference Standards used are PT-100 up to 420 °C, and Noble Metal TCs up to 100 °C
	350 °C to 1100 °C	3.5 K	

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Humidity			
Hygrometers / Humidity Sensors, Humidity Indicators	10 % to 20 % > 20 % to 30 % > 30 % to 50 % > 50 % to 75 % > 75 % to 90 % > 90 % to 95 %	0.28 % RH 0.37 % RH 0.67 % RH 0.90 % RH 1.00 % RH 1.18 % RH	JNMISMP(56), Issue (1), **Rev, (4)** **Date:22/6/2017** 0 °C to 70 °C
Hygrometers/ Humidity Sensors, Humidity Indicators	10 % to 20 % > 20 % to 30 % > 30 % to 50 % > 50 % to 75 % > 75 % to 90 % > 75 % to 90 %	0.50 % RH 0.66 % RH 1.2 % RH 1.6 % RH 1.8 % RH 2.2 % RH	JNMISMP(57), Issue (1), **Rev, (3)** **Date:[22/6/2017]** Reference is capacitive sensor Uncertainty is an absolute value of relative humidity 0 °C to 70 °C
Force			

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Load cells in Compression Mode	10 KN to 100 KN 50 KN to 500 KN 100 KN to 1000 KN 200 KN to 2000 KN	0.034 %. Fi 0.32 %. Fi 0.28 %. Fi 0.11 %. Fi	ISO 376:2011 **ASTM E74:2018.** JNMISMP(77), Issue (1), Rev, (1) Date: 6/10/2013
Load cells in Tension Mode	10 KN to 100 KN 50 KN to 500 KN 100 KN to 1000 KN 200 KN to 2000 KN	0.034 %. Fi 0.32 %. Fi 0.28 %. Fi 0.11 %. Fi	ISO 376:2011 **ASTM E74:2018.** JNMISMP(77), Issue (1), Rev, (1) Date: 6/10/2013

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Pressure			
Absolute pressure p_{abs}	0.1 bar to 3.5 bar	$4.6 \cdot 10^{-5} \cdot p_{abs}$ but not less than 12 µbar	DAkkS-DKD R 6-1 EURAMET/cg-17 JNMISMP(55), Issue (1), Rev, **(5) Date: February/2018** JNMISMP(74) Pressure medium: Gas The uncertainty of the residual pressure has to be taken into account. in connection with a gas/ oil volume Principle of measurement: pabs = pe + pamb. The uncertainty of the measured atmospheric pressure has to be taken into account. In case of atmospheric pressure, comparison using JNMISMP74
	>3.5 bar to 35 bar	$4.6 \cdot 10^{-5} \cdot p_{abs}$	
	>35 bar to 201 bar	$7.5 \cdot 10^{-5} \cdot p_{abs}$	
Absolute pressure p_{abs}	0.8 bar ; 20.8 bar to 700.8 bar	$7.5 \cdot 10^{-5}$ p_{abs} but not less than 4.8 mbar	DAkkS-DKD R 6-1 EURAMET/cg-17 JNMISMP(55), Issue (1), Rev, **(5) Date: February/2018** Pressure medium: Oil Principle of measurement: $p_{abs} = p_e + p_{amb}$. The uncertainty of the measured atmospheric pressure has to be taken into account.

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Gauge pressure P_e	-0.7 bar to -0.2 bar >-0.2 bar to 0 bar >0 bar to 0.2 bar >0.2 bar to 3.5 bar >3.5 bar to 35 bar >35 bar to 200 bar	0.07 mbar 0. 011 mbar 0.008 mbar $4.6 \cdot 10^{-5} \cdot p_e$ but not less than 12 µbar $4.6 \cdot 10^{-5} \cdot p_e$ $7.5 \cdot 10^{-5} \cdot p_e$	DAkkS-DKD R 6-1 EURAMET/cg-17 JNMISMP(55), Issue (1), Rev, **(5) Date: February/2018** Pressure medium: Gas in connection with a gas/ oil volume
Gauge pressure P_e	0 bar; 20 bar to 700 bar	$7.5 \cdot 10^{-5} \cdot p_e$ but not less than 4.8 mbar	*DAkkS-DKD R 6-1* *EURAMET/cg-17* *JNMISMP(55), Issue (1), Rev, (3)* *Date:August/2011* *Pressure medium: Oil*
Scope of Barometeric Measurement Table			
Absolute pressure (barometric pressure) p_{abs}	90 kPa	0.01 kPa	JNMISMP(74), Issue (1), Rev, (1) Date: 9/5/2013

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC) [a]***	***Calibration Methods/ Standards/ Remarks***
Electrical-High Voltage Source			
DC Voltage	1 kV to 40 kV	0.2 % . Vm	JNMISMP82, **Issue No.(1), Rev(1), Date: 15/9/2015** Where Vm is the Measured Voltage
AC Voltage	1 kV to 20 kV	1.6 %. Vm	JNMISMP82, **Issue No.(1), Rev(1), Date: 15/9/2015** Where Vm is the Measured Voltage
Electrical-High Voltage Probe			

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

DC Voltage	1 kV to 25 kV	0.4 % . Vm	JNMISMP82, **Issue No.(1), Rev(1), Date: 15/9/2015** Where Vm is the Measured Voltage
AC Voltage	1 kV to 10 kV	2 %. Vm	JNMISMP82, **Issue No.(1), Rev(1), Date: 15/9/2015** Where Vm is the Measured Voltage
Electrical- Earth Testers & Meggers			
Earth Testers	1 mΩ to 10 kΩ	0.26 %	JNMISMP83, **Issue No.(1), Rev(1), Date: 15/9/2015**
Meggers and Insulation Testers	1 kΩ to 100 GΩ	0.26 %	JNMISMP83, **Issue No.(1), Rev(1), Date: 15/9/2015**

Permanent Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Sound Level Meters			
Sound Level Meters and Acoustic Calibrators	94 dB, 114 dB	0.4 dB	JNMISMP85, Issue No.(1), Rev(1), Date: 15/9/2015
Electrical- Power Meters			

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

AC Power Meters	0 kW to 20 kW	0.1 % . P	JNMISMP86 , Issue No.(1), Rev(1), Date: 15/9/2015 Where P is the indicated power
Volume			
Pipettes	10uL ≤ V ≤ 50 mL	0.03 µL	JNMISMP52, Issue No. (1), Rev (2), Date: June/2016 & Euramet cg-19, Version 2.1 (03/2012) & ISO Series 8655:2002
Volumetric Apparatus	50 mL ≤ V ≤ 50 L	0.01 mL	JNMISMP52, Issue No. (1), Rev (2), Date: June/2016 & Euramet cg-19, Version 2.1 (03/2012) & ISO Series 8655:2002

On-Site Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC) [a]***	***Calibration Methods/ Standards/ Remarks***
Pressure			
Gauge pressure p_e	-0.8 bar to 0 bar >0 bar to 20 bar >20 bar to 200 bar	0.08 mbar 1.0 mbar 29 mbar	DAkkS-DKD R 6-1 EURAMET/cg-17 JNMISMP(37), **Issue (1), Rev, (2) Date:April/2014** Pressure medium: Gas

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

Gauge pressure p_e	0 bar to 700 bar	29 mbar	DAkkS-DKD R 6-1 EURAMET/cg-17 JNMISMP(37), **Issue (1), Rev, (2) Date:April/2014** Pressure medium: Oil
Barometric Measurement Table			
Absolute pressure (barometric pressure) p_{abs}	84 kPa - 110 kPa	0.01 kPa	JNMISMP(74), Issue (1), Rev, (1) Date: 9/5/2013
Mass			
Nonautomatic weighing instruments	Up to 60 kg	$2 \cdot 10^{-6}$	EURAMET / cg – 18 JNMISMP(45), Issue (1), **Rev. (5) Date: June/2016** For weight pieces according to OIML R 111, class E2
	> 60 kg to 100 kg	$6 \cdot 10^{-6}$	EURAMET / cg – 18 JNMISMP(45), Issue (1), **Rev. (5) Date: June/2016** For weight pieces according to OIML R 111, class F1
	> 100 to 770 kg	$3 \cdot 10^{-5}$	EURAMET / cg – 18 JNMISMP(45), Issue (1), **Rev. (5) Date: June/2016** For weight pieces according to OIML R 111, class M1and other weights
Conventional Mass	5 kg 10 kg 20 kg 50 kg 5 kg to 50 kg	25 mg 50mg 100mg 250mg $5 \cdot 10^{-6}$ mc	OIML recommendation R 111, class F2 For free nominal values m_c: conventional mass

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

On-Site Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Temperature			
Climatic chambers with air circulation systems	-85 °C to 0 °C	1.2 K	JNMISMP(71), Issue (1), Rev, (1) Date:8/5/2012 Euramet cg-20, Version 5.0 (09/2017) Mapping using thermocouples If loaded, type and arrangement of loading has to be specified exactly in the calibration certificate
	> 0 °C to 60 °C	0.5 K	
	> 60 °C to 100 °C	1.2 K	
	-85 °C to 0 °C	1.5 K	
	> 0 °C to 60 °C	0.75 K	
	> 60 °C to 100 °C	1.4 K	
Climatic chambers without air circulation systems	-85°C to 0 °C	2.0 K	
	> 0 °C to 60 °C	1.0 K	
	> 60 °C to 100 °C	1.6 K	
	-85°C to 0 °C	2.5 K	
	> 0 °C to 60 °C	1.5 K	
	> 60 °C to 100 °C	2.0 K	
Calibration of industrial thermometers (RTD, TC and direct reading devices)	-25°C to 125 °C	0.2 K	JNMISMP(72), Issue No. (1), **Rev, (3)** **Date:15/2/2018** Comparison with RTD
	> 125°C to 400 °C	0.4 K	
	> 400°C to 1100 °C	5 K	

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

On-Site Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Relative humidity			
Climatic chambers with air circulation system (On-site)	5 % to 11 % > 11 % to 20 % > 20 % to 30 % > 30 % to 50 % > 50 % to 75 % > 75 % to 90 % > 90 % to 95 %	0.6 % 0.9 % 1.1 % 1.9 % 2.5 % 2.8 % 3.5 %	JNMISMP(71), Issue (1), Rev, (2) Date:22/7/2015 Euramet cg-20, Version 5.0 (09/2017) Method C Measurement with capacitive reference humidity sensor If loaded, type and arrangement of loading has to be specified exactly in the calibration certificate Measurement uncertainty is an absolute value
	5 % to 11 % > 11 % to 20 % > 20 % to 30 % > 30 % to 50 % > 50 % to 75 % > 75 % to 90 % > 90 % to 95 %	0.6 % 1.0 % 1.2 % 2.1 % 2.9 % 3.2 % 3.9 %	JNMISMP(71), Issue (1), Rev, (2) Date:22/7/2015 Euramet cg-20, Version 5.0 (09/2017) Methods A and B Air temperature 20°C
Length			
Extensometer	(0 to 5) mm	0.4 µm	JNMISMP(87), Issue (1), Rev, (1) Date:14/10/2015 ISO 9513: 2012 ASTM E83-10a: 2010

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

On-Site Calibration

Measurand	***Measuring Range***	***Calibration and measurement Capability (CMC)*** [a]	***Calibration Methods/ Standards/ Remarks***
Force			
Machines in Compression Mode	0.1 kN to 100 kN 100 kN to 1000 kN 1000 kN to 2000 kN	0.04 %. Fi 0.056 %. Fi 0.074 %. Fi	**ISO 7500-1:2018** **ASTM E4:2016.** JNMISMP(78), **Issue (1), Rev, (2) Date: 28/6/2018**
Machines in Tension Mode	10 N to 100 kN 100 kN to 1000 kN 1000 kN to 2000 kN	0.04 %. Fi 0.05 %. Fi 0.074 %. Fi	**ISO 7500-1:2018** **ASTM E4:2016.** JNMISMP(78), **Issue (1), Rev, (2) Date: 28/6/2018**

Annex (1)
Updated on: 2019-02-19

To the Accreditation Certificate No. JAS Cal. - 001 Dated 2016-01-27
For Jordan National Metrology Institute (JNMI)/ Amman

Scope of Accreditation

Calibration of AC & DC Current, AC & DC Voltage, DC Resistance, Mass & Balances, Temperature, Humidity Relative humidity, Force, Length, Pressure, Electrical-High Voltage, Electrical-Earth Testers & Meggers, Electrical- Power Meters, Sound Level Meters & Volume

a) The reported CMCs are expressed at approximately the 95 % level of confidence, using a coverage factor of k = 2.
The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

List of employees in the laboratory who are technically responsible for issuing the calibration certificates in the scope of accreditation:

1. **Director of JNMI/ Eng. Fawaz M. Al-Labadi.**
2. **Head of Physical and Mechanical Metrology Division/ Eng. Loai M. Qdairat.**
3. **Head of Electrical Metrology Division/ Eng. Mustafa F. Flaifel.**
4. **Head of Physical Calibration Laboratory / Eng. Sukaina Deebajeh**
5. **Head of Mechanical Calibration Laboratory/ Eng. Mariam Bishtawi**
6. **Calibration Engineer/ Eng. Manal Abu Khalaf.**
7. **Calibration Engineer/ Eng. Dua'a Flaifel**
8. **Calibration Technician/ Mahmoud Sayyah.**
9. **Calibration Technician/ Tareq Mofadi.**
10. **Calibration Technician/ Omar Al-Omari.**
11. **Calibration Technician/ Waheed Al-Ali.**
12. **Calibration Technician/ Fadi Al-Husban**