REPUBLIC OF BULGARIA
Executive agency
Bulgarian accreditation service

Signatory to the EA Multilateral Agreement in this field

BAS QF 2.11

ORDER

№ A 365

Sofia, 01.12.2025

Pursuant to Art. 10, para. 1, item 2a of the Law on National Accreditation of Conformity Assessment Bodies, in connection with amendment of an element of the certificate content, according to item 4.3.8. f) of the BAS QR 2 Accreditation Procedure and EA BAS order reg. № A 364/01.12.2025, I hereby

AMEND

EA BAS order reg. № A 210/24.06.2025, to a certificate of accreditation reg. № 14 ЛК/24.06.2025, valid until 11.05.2026, as follows:

MICROSYST LTD
LABORATORY FOR CALIBRATION OF MEASURING EQUIPMENT

Management address: 4002 Plovdiv, 57 Trakia Str.
Laboratory address: 4002 Plovdiv, 4 Murgash Str.

To perform calibration of:

Type of the scope: *fixed*

№	Measuring instrument	Measured quantity, Measurement unit	Range of measurement	Measurement Uncertainty	Calibration method
1	2	3	4	5	6
1.	Calibrators and voltmeters for DC voltage	Electric voltage (Volt) V	0 V to 0,1 V	$3,5.10^{-6}$ V to $8,5.10^{-6}$ V	MK 7.02 01-01:2024 direct and comparative method
			0,1 V to 10 V	$8,5.10^{-6}$ V to $0,1.10^{-3}$ V	
			10 V to 750 V	$0,1.10^{-3}$ V to 15.10^{-3} V	
	Calibrators and voltmeters for AC voltage, at industrial frequency	Electric voltage (Volt) V	0,01 V to 10 V	15.10^{-6} V to $1,5.10^{-3}$ V	
			10 V to 750 V	$1,5.10^{-3}$ V to 0,15 V	
	Calibrators and voltmeters for AC voltage at 1 kHz frequency	Electric voltage (Volt) V	0,01 V to 10 V	33.10^{-6} V to 7.10^{-3} V	
			10 V to 750 V	7.10^{-3} V to 0,15 V	
2.	Calibrators and Ammeters for DC Current.	Electric current, Ampere (A)	0 A to 1.10^{-3} A	25.10^{-9} A to $0,1.10^{-6}$ A	MK 7.02 01-02:2024 direct and comparative method
			1.10^{-3} A to 0,1 A	$0,1.10^{-6}$ A to 9.10^{-6} A	
			0,1 A to 2 A	9.10^{-6} A to $0,3.10^{-3}$ A	
	Calibrators and ammeters for AC	Electric current, Ampere (A)	2.10^{-3} A to 0,1 A	3.10^{-6} A to 35.10^{-6} A	

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e-mail: office@nab-bas.bg; web: www.nab-bas.bg

Type of the scope: *fixed*					
№	**Measuring instrument**	**Measured quantity, Measurement unit**	**Range of measurement**	**Measurement Uncertainty**	**Calibration method**
1	2	3	4	5	6
	Current, at industrial frequency	Electric current, Ampere (A)	0,1 A to 2 A	35.10^{-6} A to 3.10^{-3} A	
	Calibrators and ammeters for AC Current, at 1kHz frequency		2.10^{-3} A to 0,1 A	4.10^{-6} A to 55.10^{-6} A	
			0,1 A to 2 A	55.10^{-6} A to 3.10^{-3} A	
3.	DC resistance standards, DC resistance calibrators and DC resistance decade boxes	Electrical resistance, Ohm (Ω)	0,01 Ω to 100 Ω	4.10^{-3} Ω to 12.10^{-3} Ω	MK 7.02 01-03:2024 direct method
			0,1 kΩ to 100 kΩ	12.10^{-6} kΩ to 3.10^{-3} kΩ	
			0,1 MΩ to 100 MΩ	3.10^{-6} MΩ to 0,2 MΩ	
4.	Ohmmeters	Electrical resistance, Ohm (Ω)	0,01 Ω to 100 kΩ	2.10^{-3} Ω to $7.\ 10^{-3}$ kΩ	MK 7.02 01-04:2024 direct method
			1 MΩ	$0{,}4.10^{-3}$ MΩ	
			10 MΩ	2.10^{-3} MΩ	
			100 MΩ	0,24 MΩ	
5. (*)	Converters with DCU and R input /temperature indicators/	Temperature, degrees Celsius (°C)	For Resistance thermometers (RTD) input: 0,01 Ω to 100 kΩ output: от -200°C to 850 °C	0,06 °C	MK 7.02 01-05:2024 direct method
			For thermocouples input: -50 mV to 150 mV output: -200 °C to 1850 °C	0,2 °C	
	Converters with DCU, DCI input, for temperature, relative humidity, pH, pressure /indicators with uniform input signal/	Temperature, degrees Celsius (°C)	-200 °C to 1 850 °C	0,2 °C	
		Relative humidity, %RH	0 %rh to 100 %rh	0,1 %rh	
		pH-hydrogen index	0 to 14	0,001	
		Pressure bar (bar)	-1 bar to 1 000 bar	1.10^{-5} bar to 1.10^{-3} bar	
	Secondary converters with input DCU, DCI, R and ACU, ACI at industrial frequency and with output DCU, DCI	Electric voltage (Volt) V	input: 0 V DC to 750 V DC output: 0 V DC to 11 V DC	15.10^{-6} V DC to $0{,}5.10^{-3}$ V DC	
		Electric current, Ampere (A)	input: 0 V DC to 750 V DC output: 0 mA DC to 100 mA DC	4.10^{-3} mA DC to 15.10^{-3} mA DC	
		Electric voltage (Volt) V	input: 0.01 V AC to 750 V AC output: 0 V DC to 11 V DC	25.10^{-6} V DC to $0{,}5.10^{-3}$ V DC	
		Electric current, Ampere (A)	input: 0.01 V AC to 750 V AC output: 0 mA DC to 100 mA DC	1.10^{-3} mA DC to 0,2 mA DC	

Type of the scope: *fixed*					
№	**Measuring instrument**	**Measured quantity, Measurement unit**	**Range of measurement**	**Measurement Uncertainty**	**Calibration method**
1	2	3	4	5	6
		Electric voltage (Volt) V	input: 0 A DC to 2 A DC output: 0 V DC to 11 V DC	15.10^{-6} V DC to $0{,}5.10^{-3}$ V DC	
		Electric current, ampere (A)	input: 0 A DC to 2 A DC output: 0 mA DC to 100 mA DC	4.10^{-3} mA DC to 15.10^{-3} mA DC	
		Electric voltage (Volt) V	input: $2.\ 10^{-3}$ A AC to 2 A AC output: 0 V DC to 11 V DC	25.10^{-6} V DC to $0{,}5.10^{-3}$ V DC	
		Electric current, Ampere (A)	input: $2.\ 10^{-3}$ A AC to 2 A AC output: 0 mA DC to 100 mA DC	2.10^{-3} mA DC to 0,2 mA DC	
		Electric voltage (Volt) V	input: 0,01 Ω to 100 κΩ output: 0 V DC to 11 V DC	18.10^{-6} V DC to $0{,}5.10^{-3}$ V DC	
		Electric current, Ampere (A)	input: 0,01 Ω to 100 κΩ output: 0 mA DC to 100 mA DC	$0{,}1.10^{-3}$ mA DC to 9.10^{-3} mA DC	
	DCU, DCI and R calibrators for non-electrical values simulation	Electric voltage (Volt) V	0 V to 11 V DC	$3{,}5.10^{-6}$ V DC to $0{,}15.10^{-3}$ V DC	MK 7.02 01-05:2024 direct method
		Electric current, Ampere (A)	0 A to 0,1 A DC	$25.\ 10^{-9}$ A DC to $9.\ 10^{-6}$ A DC	
		Electrical resistance, Ohm (Ω)	1 Ω to $4\ .10^{3}$ Ω	5.10^{-3} Ω to 0,11 Ω	
6.	Digital thermometers	Temperature, degrees Celsius (°C)	-45 °C to 150 °C	0,05 °C	MK 7.02 01-06:2024 comparative method
			150 °C to 300 °C	0,05 °C to 0,15 °C	
			300 °C to 650 °C	0,15 °C to 0,7 °C	
7.	Relative humidity meters (hygrometers) and transmitters	Relative humidity, (%RH)	10 %rh to 90 %rh	1,5 %rh to 1,8 %rh	MK 7.02 01-07:2024 comparative method
8.	Analogue and liquid-in-glass thermometers	Temperature, degrees Celsius (°C)	-45 °C to 650 °C	0,1 °C to 0,7 °C	MK 7.02 01-08:2024 comparative method
9.	Thermocouples	Temperature, degrees Celsius (°C)	-45 °C to 150 °C	0,4 °C	MK 7.02 01-09:2024 direct method
			150 °C to 300 °C	0,4 °C to 0,6 °C	
			300 °C to 650 °C	0,6 °C to 0,9 °C	

Type of the scope: *fixed*					
№	**Measuring instrument**	**Measured quantity, Measurement unit**	**Range of measurement**	**Measurement Uncertainty**	**Calibration method**
1	2	3	4	5	6
10.	Resistance thermometers (RTD)	Temperature, degrees Celsius (°C)	-45 °C to 150 °C	0,05 °C	MK 7.02 01-10:2024 direct method
			150°C to 300 °C	0,05 °C to 0,15 °C	
			300 °C to 650 °C	0,15 °C to 0,7 °C	
11. (*) (**)	Pressure gauges, vacuum gauges, pressure-vacuum gauges, calibrators, pressure transmitters with uniform output signal.	Pressure bar (bar) operation medium - gas	-0,95 bar to 1,5 bar	1.10^{-3} bar	MK 7.02 01-11:2024 direct and comparative method
			0 bar to 35 bar	5.10^{-3} bar to 15.10^{-3} bar	
		Pressure bar (bar) operation medium - fluid	0 bar to 400 bar	0,2 bar	

* At the calibration of converters with unified input or output signal under item 5 and item 11, electrical signals are used:
- for DCI in the range: 0 mA DC to 20 mA DC
- for DCU in the range: 0 V DC to 10 V DC

** The measurement ranges are consistent with the measurement ranges of the standards used in calibration.

Note: *The calibration of measuring instruments is carried out in the calibration laboratory premises or on-site at the customer.*

References:

1. MK 7.02 01-01:2024- Procedure for calibration of voltmeters and calibrators for DC and AC voltage.

2. MK 7.02 01-02:2024 - Procedure for calibration of ammeters and calibrators for DC and AC current

3. MK 7.02 01-03:2024- Procedure for calibration of DC resistance standards, DC resistance calibrators and DC resistance decade boxes.

4. MK 7.02 01-04:2024 - Procedure for calibration of ohmmeters.

5. MK 7.02 01-05 :2024 - Procedure for calibration of secondary converters with DCU, ACU, DCI, ACI and resistance input, and with DCU, DCI and resistance output.

6. MK 7.02 01-06:2024 - Procedure for calibration of digital thermometers.

7. MK 7.02 01-07:2024 - Procedure for calibration of Relative humidity meters (hygrometers) and transmitters .

8. MK 7.02 01-08:2024 - Procedure for calibration of analogue and liquid-in-glass thermometers.

9. MK 7.02 01-09:2024 - Procedure for calibration of thermocouples.

10. MK 7.02 01-10:2024 - Procedure for calibration of resistance thermometers (RTD).

11. MK 7.02 01-11:2024 - Procedure for calibration of pressure measuring and generating devices (vacuum gauges, manometers, pressure transmitters, pressure calibrators).

I ORDER

To issue the certificate of accreditation reg. № 14 ЛК/01.12.2025, valid until 11.05.2026, and this order as an integral part of it.

The certificate of accreditation with the enclosure to be received by the manager of MICROSYST LTD, the head of the Laboratory for calibration of measuring equipment at MICROSYST LTD, or other authorized person in the office of EA BAS.

Upon receipt of the certificate and the enclosure issued, the accredited person is obliged to return to EA BAS the originals of accreditation certificate № 14 ЛК/24.06.2025, and its enclosure, EA BAS order reg. № А 210/24.06.2025.

This order shall be notified to legal entity/sole trader, within 3 (three) days from its issuance.

Eng. Mariya Ilieva - Yordanova

Executive Director
of Executive agency Bulgarian accreditation service