



EXECUTIVE AGENCY
BULGARIAN ACCREDITATION SERVICE

BAS reg. № 23 ЛК

From: 28.07.2025

Valid until: 30.08.2028

CERTIFICATE OF ACCREDITATION

EMSYST-6 LTD.

CALIBRATION LABORATORY EMSYST

Management and Laboratory address:

Bulgaria, 1784 Sofia, 133 Tsarigradsko Shosse Blvd, BIC IZOT, Office 304

UIC: 121599480

Scope of accreditation

To perform calibration of:

Electronic standard electricity meters, single-phased and three-phased, for active energy at frequency of 50Hz. Electronic standard electricity meters, single-phased and three-phased, for reactive energy at frequency of 50Hz. Test Benches using an Electronic standard electricity meter for metrological verification of electricity meters, single-phased and three-phased, for active and reactive energy at frequency of 50Hz. Flow rate meters and portable flow rate meter stations, calibrated with operating fluid water within the range from 0.006 m³/h to 70.00 m³/h.

ACCREDITED ACCORDING TO БДC EN ISO/IEC 17025:2018

Order № A 247/28.07.2025 is an integral part of the certificate of accreditation, total 5 pages.

Date of initial accreditation: 21.01.2008

Re-accreditation date: 30.08.2024

Executive director:

Eng. Irena Borislavova



EA BAS

BG 2025175



Signatory to the EA Multilateral Agreement in this field

ORDER

№ A 247

Sofia, 28.07.2025

Pursuant to Art. 10, para. 1, item 2a, Art. 20, para. 6 of the Law on National Accreditation of Conformity Assessment Bodies, item 5.3.1 e) of the BAS QR 2 Accreditation Procedure, in connection with an open procedure reg. № 26/23 ЛК/ПА/09.02.2024, assessment report reg. № 26/23 ЛК/4/В/22.05.2025 and EA BAS order reg. № A 246/28.07.2025, I hereby

AMEND

EA BAS order reg. № A 330/30. 08. 2024 of

EMSYST-6 LTD.

CALIBRATION LABORATORY EMSYST

Management and Laboratory address:

Bulgaria, 1784 Sofia, 133 Tsarigradsko Shosse Blvd, BIC IZOT, Office 304

To perform calibrating of:

Type of the scope: <i>Fixed</i>					
№	Measuring Instrument	Measure and, Measure ment Unit	Measurement Range	Measurement Uncertainty	Calibration Method
1	2	3	4	5	6
1.	Standard Electricity Meters, Electronic, Single-Phase and Three-Phase for Active Energy at frequency 50 Hz	Electrical Energy, Active, kWh	Per phase From 1,25 Ws to 21,6.10 ⁶ Ws Voltage (U): From 50 V to 300 V Current (I): From 0,05 A to 120 A Power Factor: From 1 to 0,5 ind, or from 1 to 0,8 cap Time interval from 1 s to 600 s	0,020 % at cos φ = 1 U ≤ 230 V 0,025 % at cos φ = 1 U > 230 V and at cos φ = 0,5 ind/ cos φ = 0,8 cap U ≤ 230 V I ≤ 12 A 0,030 % at cos φ = 0,5 ind/ cos φ = 0,8 cap	WI 7.6.1-1 № E-MK-01/20

Type of the scope: Fixed

Nº	Measuring Instrument	Measure and, Measure ment Unit	Measurement Range	Measurement Uncertainty	Calibration Method
1	2	3	4	5	6
				$I > 12 \text{ A}$	
2.	Standard Electricity Meters, Electronic, Single-Phase and Three-Phase for Reactive Energy at frequency 50Hz	Electrical Energy, Reactive, kvarh	Per phase from 0,625 vars to $21,6 \cdot 10^6$ vars Voltage (U) from 50 V to 300 V Current (I) from 0,05 A to 120 A Power Factor from 1 to 0,25, ind or cap Time interval From 1s to 600s	0,025 % at $\sin \varphi = 1$ $U \leq 230 \text{ V}$ 0,030 % at $\sin \varphi = 1$ $U > 230 \text{ V}$, and at $\sin \varphi = 0,25$ ind/cap $U \leq 230 \text{ V}$ $I \leq 12 \text{ A}$ 0,035 % at $\sin \varphi = 0,25$ ind/cap $I > 12 \text{ A}$	WI 7.6.1-1 Nº E-MK-01/20
3.	Test Benches with an Electronic Standard Electricity Meter for Metrological Verification of Electricity Meters, Single-Phase and Three-Phase, for Active and Reactive Energy at frequency 50Hz	Electrical Energy, Active, kWh,	For active energy, per phase from 1,25 Ws to $21,6 \cdot 10^6$ Ws Voltage (U) from 50 V to 300 V Current (I) from 0,05 A to 120 A Power Factor From 1 to 0,5 ind, or from 1 to 0,8 cap Time interval from 1 s to 600 s	0,020 % at $\cos \varphi = 1$ $U \leq 230 \text{ V}$ 0,025 % at $\cos \varphi = 1$ $U > 230 \text{ V}$ and at $\cos \varphi = 0,5$ ind/ $\cos \varphi = 0,8$ cap $U \leq 230 \text{ V}$ $I \leq 12 \text{ A}$ 0,030 % at $\cos \varphi = 0,5$ ind/ $\cos \varphi = 0,8$ cap $I > 12 \text{ A}$	WI 7.6.1-4 Nº EY-MK-04/25

Type of the scope: <i>Fixed</i>					
Nº	Measuring Instrument	Measure and, Measure ment Unit	Measurement Range	Measurement Uncertainty	Calibration Method
1	2	3	4	5	6
		and Reactive, kvarh	For reactive energy, per phase From 0,625 vars to 21,6.10 ⁶ vars Voltage (U) from 50 V to 300 V Current (I) from 0,05 A to 120 A Power factor from 1 to 0,25 ind or cap Time interval from 1 s to 600 s	0,025 % at sin φ = 1 U ≤ 230 V 0,030 % at sin φ = 1 U > 230 V and at sin φ = 0,25 ind/cap U ≤ 230 V I ≤ 12 A 0.035 % at sin φ = 0,25 ind/cap I > 12 A	
4.	Flow Meters and Portable Flow Meter Stations, Calibrated with Operating Fluid Water in the range from 0,006 m ³ /h to 70,00 m ³ /h	Volume, m ³	From 0,001 m ³ to 0,3 m ³ (at the range from 0,006 m ³ /h to 30,0 m ³ /h) (at the range from 30,0 m ³ /h to 70,0 m ³ /h)	0,10 % 0,20%	WI 7.6.1-2 Nº P-MK-01/20

References:

1. WI 7.6.1-1 Nº E-MK-01/20 Calibration Methodology for Standard Electronic Electricity Meters, validated on 17.07.2020;
2. WI 7.6.1-4 Nº EY-MK-04/25 Calibration Methodology for Test Benches with an Electronic Standard Electricity Meter for Metrological Verification of single-phase and three-phase electricity meters for active and reactive energy, validated on 22.05.2025;
3. WI 7.6.1-2 Nº P-MK-01/20 Calibration Methodology for Flow Meters and Portable Flow Meter Stations, validated on 03.09.2020.

Note:

The calibrations of measurement instruments for positions 1, 2 and 3 shall be carried out in the Laboratory premises, and on the customer's site.

The calibrations of measurement instruments for position 4 shall be carried out only in the Laboratory premises.

I ORDER

To issue the certificate of accreditation reg. № 23 ЛК/28.07.2025, valid until 30.08.2028 and this order as an integral part of it.

The certificate of accreditation with the enclosure should be obtained from the manager of EMSYST-6 Ltd, Sofia, head of the Calibration Laboratory EMSYST, at EMSYST-6 Ltd, Sofia, or other authorized person in the office of EA BAS.

Upon receipt of the certificate issued and enclosure, the accredited person is obliged to return to EA BAS the originals of the certificate of accreditation reg. № 23 ЛК/30.08.2024, valid until 30.08.2028 and its enclosure - EA BAS order reg.№ A 330/30.08.2024.

This order shall be notified to the Calibration Laboratory EMSYST, at EMSYST-6 Ltd, Sofia, within 3(three) days from its issuance.

Eng. Irena Borislavova

*Executive Director
of Executive agency Bulgarian accreditation service.*

