



Sysmex Nederland B.V.
Ecustraart 11
4879 NP Etten-Leur

CALIBRATION CERTIFICATE

Certificate number: 311721101032

Page 1 of 2

Applicant: Promethor Oy
Rautakatu 5 A6
20520 Turku
Finland

Examined instrument:	Make	Type	Serial number
Sound Level Meter	Rion	NL-52	00754075
Microphone	Rion	UC-59	08423
Preamplifier	Rion	NH-25	54144

Calibration date: Feb. 23 2024

Calibration method: Periodic tests were performed on the sound level meter with microphone and preamplifier in accordance with procedures and requirements as specified in IEC 61672-3:2013. Before and after the tests the sound level meter is calibrated with an acoustic reference calibrator (94,1 dB ; 1 kHz) and adjusted if necessary

Performance Class: Class-1

Results: The results of the verification are stated on page 2 of this certificate

Ambient conditions: Static pressure: 98,9 kPa
Air temperature: 21,0 °C
Relative humidity: 49,4 %

Statement: We hereby declare that the results relate only to the calibrated objects as mentioned above under examined instrument

Traceability: The measurements have been executed using standards for which the traceability to (inter)national standards has been demonstrated towards the Raad voor Accreditatie.

Executed :

Etten-Leur, Feb. 23 2024

ing. A.C. Dekkers
Product Application Specialist Calibration

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Status of the instrument				
Measurement		Upon receipt (Pass/Fail)	Adjusted (Yes/No)	After adjustment (Pass/Fail)
1*	Reading / Long term stability IEC 61672-3:2013 10, 15	Pass	Yes	Pass
2	Self-generated noise IEC 61672-3:2013 11	Pass	No	Pass
3	Frequency response (acoustic), C frequency weighting IEC 61672-3:2013 12	Pass	No	Pass
4	Supplied acoustic calibrator IEC 61672-3:2013 3.6	Refer to separate certificate		
5	Frequency weighting (electrical input), A, C and Lin frequency weighing IEC 61672-3:2013 13	Pass	No	Pass
6	Frequency and Time weighting at 1 kHz A, C and Lin frequency weighing IEC 61672-3:2013 14	Pass	No	Pass
7	Accuracy of the attenuator IEC 61672-3:2013 16, 17	Pass	No	Pass
8	Toneburst F, S, SEL and Cpeak IEC 61672-3:2013 18, 19	Pass	No	Pass
9	Linearity of the indicator IEC 61672-3:2013 16	Pass	No	Pass
10	Overload indication IEC 61672-3:2013 20	Pass	No	Pass
11	High-level stability IEC 61672-3:2013 21	Pass	No	Pass
Measurement uncertainty:				
Measurement 1: Reading under reference conditions: ± 0.3 dB				
Measurement 2: Frequency response: 125 Hz – 2 kHz: ± 0.3 dB, 8 kHz: ± 0.7 dB				
Measurement 4 to 8: Electrical properties: ± 0.15 dB / 0.1 Hz				
The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, which provides a confidence level of approximately 95 %. The standard uncertainty has been determined in accordance with EA-4/02.				
* Refer to table below for detailed results x: Not applicable				

Measurement results before and after adjustment (acoustic calibration)			
Measurement		Upon receipt Deviation (dB)	After adjustment Deviation (dB)
1	Deviation of the reading under reference conditions (at 94,1 dB - 1 kHz). IEC 61672-3:2013 10	0,2	0,0
** After verification of all properties			

Type approval:

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed. As evidence was publicly available, from an independent testing organization responsible for approving the results of pattern-evaluation tests performed in accordance with IEC 61672-2:2013, to demonstrate that the model of sound level meter fully conformed to the Class 1 specifications in IEC 61672-1:2013, the sound level meter submitted for testing conforms to the Class 1 specifications of IEC 61672-1:2013.

Type approval source:

PTB Germany nr.: DE-20-M-PTB-0034