OIML Certificate

OIML Member State
The Netherlands

Number R137/2012-A-NL1-20.10 revision 9
Project number 3777055

Issuing authority	NMi Certin B.V. Person responsible: M.Ph.D. Schmidt
Applicant and Manufacturer	MeteRSit Viale dell'Industria, 34 35129 Padova Italy
Identification of the certified type	A **thermal-mass flow gas meter** Type: x485xxx
Characteristics	See following page(s)

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 137-1:2012 "Gas meters"

Accuracy class 1,5

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation identified above.
This Certificate does not bestow any form of legal international approval.

This certificate and supporting reports comply with the requirements of OIML-CS-PD-07 clause 6.2.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Type Evaluation Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority **NMi Certin B.V., OIML Issuing Authority NL1**
3 October 2024

Certification Board

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The conformity was established by the results of tests and examinations provided in the associated report(s):

- No. NMi-15200299-02 dated 15 March 2016 that includes 45 pages;
- No. NMi-16200387-02 dated 17 October 2016 that includes 61 pages.
- No. NMi-SO16204082-01 dated 10 November 2016 that includes 15 pages;
- No. NMi-16200852-01 dated 8 May 2017 that includes 13 pages;
- No. NMi-1901756-02 dated 23 March 2018 that includes 12 pages;
- No. NMi-1900623-02 dated 29 May 2017 that includes 17 pages;
- No. NMi-1901029-02 dated 11 October 2017 that includes 14 pages;
- No. NMi-1901403-02 dated 1 February 2018 that includes 21 pages;
- No. NMi-1902208-02 dated 25 July 2018 that includes 14 pages;
- No. NMi-2268368-02 dated 6 December 2018 that includes 10 pages;
- No. NMi-2327085-02 dated 13 June 2019 that includes 3 pages;
- No. NMi-1902287-02 dated 17 February 2020 that includes 18 pages;
- No. NMi-2188742-02 dated 3 June 2020 that includes 16 pages;
- No. NMi-2364857-02 dated 23 November 2020 that includes 26 pages;
- No. NMi-2477858-02 dated 2 April 2021 that includes 19 pages;
- No. NMi-2548615-01 dated 1 July 2021 that includes 17 pages;
- No. NMi-2587901-02 dated 7 October 2021 that includes 16 pages;
- No. NMi-2893273-02 dated 10 February 2022 includes 16 pages;
- No. NMi-3093042-02 dated 10 February 2022 that includes 13 pages;
- No. NMi-3476264-01 dated 3 May 2022 that includes 12 pages;
- No. NMi-3543194-02 dated 28 July 2023 that includes 15 pages;
- No. NMi-3766785-01 dated 3 September 2024 that includes 31 pages;
- No. NMi-3777055-01 dated 3 October 2024 that includes 29 pages.

Characteristics of the measuring instrument
In Table 1 the general characteristics of the measuring instrument are presented.
In Table 2 the software versions and associated checksums are presented.
In Table 3 and 4 the characteristics of the family of instruments are presented.
The construction of the measuring instrument is recorded in the Documentation folder no. T10362-53.

Table 1 General characteristics

Destined for the measurement of	Gas volume of natural gas, type H or L or Gas volume of natural gas, type H, L and E, with a Gross Wobbe Index between 39,1 MJ/m3 and 54,7 MJ/m3 at 15 °C and 1,01325 bar, including mixtures with a hydrogen concentration of up to 23% by volume.
Environmental classes	M1 / E2
Accuracy class	1.5
Maximum pressure	500 mbar
Ambient temperature range	-25 – +55 °C
Gas temperature range	-25 – +55 °C
Designed for	Condensing humidity
Orientation	Horizontal
Power supply voltage	Battery powered

Table 2 Software identification

	Version number	Checksum	Meter size
Software identification	EL10 EL40 EL40	ADB2 A7345A73 3F8C0F42	G1.6 G2.5 G4 extended
	EL10 E132 E167 G182 G192 G193 G194 GL01 GL10 GL10 I192 GL20 GL20 GL20 GL40 GL40	ADB2 03EF D029 A1A8 18FB 03B6 1CCF 5812 8096 1FA8 8F41 1B98163C E06D5DC3 8EE0A289 8AAEF5ED 9658D989	G4 MMU6

	GL45 GL45	8C4516C6 423BE916	
	GL26	923DD39B	G4 MMU6 dot display
	A132 A167 J182 J192 J193 J194 JL01 JL10 L192 JL40 JL40	CA53 7199 BDC1 3484 4586 5FFA B0DE 7EEA D8DD A7BCEB12 568CB31F	G6
	B166 B183 B192 B194 BL01 BL10 BL40	6CA4 82D8 B8EF 22FA BD57 4175 AE0F5A61	G10 MMU16
	C182 C192 C194 CL01 CL10 CL11 F154 F166 CL13 CL40	C9BE BC94 F780 62F5 B51F F7E8 E336 7D4C D1DD9B83 306988F6	G16 MMU25
	D182 D192 D194 DL01 DL10 DL11 H154 H166 DL13 DL40	E589 E889 416D CBFE 38FA 3EF9 6B95 F29E 050A7042 52840ABD	G25 MMU40
	ML38	D38DC219	G40
MMU-Hydrogen	DH25	35A7CF47	MMU40
	GH25	6B004CFA	MMU6
Metrology processing software	EL30	3CA2E7AF	G1.6

	EL31 EL32 EL37	FCCC0334 98ED4B7A DAE8303A	G2.5 G4 extended
	GL30 GL31 GL32 GL35	457E70AC 7B3F312A 2044FB12 A1919F0B	G4
	JL30 JL31 JL32	917875FB 9F7F23C6 1D9A869B	G6
Bootloader	O430	375B8BF8	GPRS
	O431	C6ECD32B	NB-IoT
	U530	CD16D523	WMBUS
	W530	CD16D523	Walk-By

Table 3 General characteristics of the family of instruments

Meter size	**G1.6**	**G2.5**	**G4 MMU6**	**G4 ext.**	**G6**
Minimum flow rate Q_{min} (m^3/h)	0,016	0,025	0,04	0,016	0,06
Transitional flow rate Q_t (m^3/h)	0,25	0,4	0,6	0,25	1
Maximum flow rate Q_{max} (m^3/h)	2,5	4	6	6	10
Overload flow rate Q_r (m^3/h)	3	4,8	7,2	7,2	12
Indicating range (m^3)	99999 or 999999				
Verification scale interval (m^3)	0,001				
Nominal diameter [mm]	19 or 32	32			

Table 4 General characteristics of the family of instruments

Meter size	G10 MMU16	G16 MMU25	G25 MMU40	G40
Minimum flow rate Q_{min} (m^3/h)	0,1	0,16	0,25	0,4
Transitional flow rate Q_t (m^3/h)	1,6	2,5	4	6,5
Maximum flow rate Q_{max} (m^3/h)	16	25	40	65
Overload flow rate Q_r (m^3/h)	19,2	30	48	78
Indicating range (m^3)	999999			
Verification scale interval (m^3)	0,001			
Nominal diameter [mm]	50	65		Flange type 02 PN16 DN65

Certificate history:
This revision replaces the previous version.

Revision	Date	Description of the modification
Initial		-
1	27 November 2020	Addition of report No. NMi-2364857-02 and software update
2	7 October 2021	Addition of meter types using SGM63xx measurement sensor Software updates
3	11 February 2022	Addition of reports No. NMi-2893273-02 and NMi-3093042-02 for revised PCBs.

Revision	Date	Description of the modification
4	3 May 2022	Addition of G1.6 version with SGM6101 Software update
5	6 October 2022 28 July 2023	Addition of new housing for MMU6 / Software versions added Addition of pulse output battery cover for G10, G16, G25, MMU25 and MMU40 models.
6	22 November 2022	New combined communication version Software update
7	21 August 2023	Correction of typo in revision number
8	11 September 2024	Dot display MMU6, new pcb and software version
9	3 October 2024	Addition of G40 with parallel SGM6325 sensors. These sensors are fitting in a new housing with new sealing and use a new software version.