

**OIML Member State**  
The Netherlands

Number R117/2019-A-NL1-22.08 revision 0  
Project number 3568185  
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Issuing authority NMI Certin B.V.  
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Identification of the certified type An **electronic calculating and indicating device** (flow computer), intended to be used as a part of a liquid measuring system for LNG.  
Type: LNG Metering Computer

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 117-1: 2019** "Dynamic measuring systems for liquids other than water"

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.

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Issuing Authority **NMI Certin B.V., OIML Issuing Authority NL1**  
19 January 2023

Certification Board

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The conformity was established by the results of tests and examinations provided in the associated reports:

- No. NMI-2495471-02 dated 18 December 2020 that includes 42 pages;
- No. NMI-3568185-01 dated 19 January 2023 that includes 14 pages.

### Characteristics of the measuring instrument

In Table 1 the general characteristics of the measuring instrument are presented.

The construction of the measuring instrument is the following:

- Computer of brand B&R, type PANEL PC xxxx<sup>[1]</sup>, equipped with a touch screen and running on Windows® 10 IoT Ent20219 or later versions.  
There are no keyboard and mouse connected to the computer.  
Power supply is 24 V DC.
- All used components shall bear the CE marking.

The LNG Metering Computer is an electronic calculating and indicating device which is intended to be used as a part of a liquid measuring system for LNG.

The LNG Metering Computer is used in conjunction with a NANOflow flow computer for the LNG measurement and an optional additional NANOflow flow computer for the BOG/Vapour return measurement. All devices are connected via TCP/IP routed via an ethernet switch.

The LNG metering computer is mounted in the door of an electronic cabinet, with the NANOflow flow computer and ethernet switch mounted in the same cabinet. The cabinet is intended to be placed in a room suitable such as a control room.

**Table 1 General characteristics**

Environmental classes	M1 / E1 / H1
Ambient temperature range	+5 °C / +55 °C
Software identification	See table 2
Communication interface	TCP/IP protocol
Power supply	24V
Approved variable	Mass

**Table 2 Software identification of the electronic calculating and indicating device type LNG Metering Computer**

Software part	Firmware version	Hash code
HMI Legally relevant version	1.00.02	90f35ef071dbc4761b7915a85a229b5e

The metrological software version can be checked via the following screen buttons on the main HMI screen: [System] – [Energy Computer].

<sup>[1]</sup> With xxxx being a non-significant indication.



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## Certificate history:

Revision	Date	Description of the modification
0	19 January 2023	Initial release