



## OIML Certificate

### **OIML Member State**

The Netherlands



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Issuing authority NMi Certin B.V.

Person responsible: M.Ph.D. Schmidt



Applicant and Manufacturer

Landis+Gyr AG

Alte Steinhauserstrasse 18

CH-6330 Cham Switzerland

Identification of the

A static Poly Phase Electrical Energy Meter

certified type

Manufacturers mark: Landis+Gyr

Type:

E860 (f9 – rack-mounted version)

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 46-1/-2: 2012 "Active electrical energy meters"

Accuracy class



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 29 October 2024

Certification Board

B.V. This document is issued under the 11 provision that no liability is accepted lift and that the applicant shall indemnify lands third-party liability.

> The notification of NMi Certin B.V. as Issuing Authority can be verified at www.oiml.org

This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon at the top of the electronic version of this certificate.





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



- No. NMi-3522680-14 dated 4 July 2023 that includes 55 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 recorded in the Documentation folder no. R46-2012-A-NL1-23.07-1.

#### **Table 1 General characteristics**

General characteristics			
Meter type	static		
Connection mode (phase, wires, elements)	3p, 4w, 3e 3p, 3w, 2e		
Direction of energy flow / registers	Two-registers, bi-directional.		
Terminal arrangement	Direct plug-in Essailec connectors		
Protective class	Category 1		
Environmental application			
Ambient temperature range	-25 °C to +55 °C		
Humidity class	H1		
IP Rating / environmental use	IP51 / indoor		
Meter quantities			
Nominal voltage ( $U_{nom}$ )	Nominal voltage Un (3-phase, 4-wire) 3 x 58/100 to 69/120 V 3 x 110/190 to 133/230 V Nominal voltage Un (3-phase, 3-wire) 3 x 100 to 120 V 3 x 190 to 230 V		
Nominal frequency (f <sub>nom</sub> )	50 Hz or 60 Hz		
Maximum current (I <sub>max</sub> )	I <sub>n</sub> = 1 A - I <sub>max</sub> 1.2 A, 1.5 A, 2 A or 10 A I <sub>n</sub> = 5 A - I <sub>max</sub> 6 A, 7.5 A or 10 A		
Transitional current (I <sub>tr</sub> )	0.05 A (I <sub>n</sub> = 1A), 0.25 A (I <sub>n</sub> = 5 A)		
Minimum current (I <sub>min</sub> )	0.01 A (I <sub>n</sub> = 1A), 0.05 A (I <sub>n</sub> = 5 A)		
Starting current (Ist)	0.001 A (I <sub>n</sub> = 1A), 0.005 A (I <sub>n</sub> = 5 A)		
Meter constant	5.000 imp/kWh, 10.000 imp/kWh, 20.000 imp/kWh, 40.000 imp/kWh, 50.000 imp/kWh, 100.000 imp/kWh, 200.000 imp/kWh		









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S1		
Version number: U.201.04.08 Checksum: 0647C93E6D9DEFE29B240DEA4CE847335645C1D246B EB47C848D6AC9B19AD19CD2CF594D83D253DD70F66 4A10E006819		
Version number: U.201.05.02 Checksum: 13A1A7D6AB9B5027A3725812CE1B804932887181B3 D7322C5C9DE0F0BCFCA0E4B41E8EC2D93CBD8FAD71 2B91C4290005		
Version number: U.201.05.03 Checksum: 52BD0C34AFA5F64DE3DE95EC6B46D3538ACE3D1E83 259EFE8AA8388AD6E31037AF590E79B79BC8ADE7E7 E0E975B07C84		
Version number: U.201.06.02 Checksum: 2693EB3AF9471E4EAE69A41A72683D607097FB84B15 376AF6E065CD3B3A857D615BC59568DDB0E4C22AE8 364A6683A92		
Version number: U.201.07.02 Checksum: 3A469D0BE5F8D44270F27C80FFB2CEA80DA6DC6C8C C85D90F40F79BC78EA00FA71643BFD5F547FD8FE368 4062B4D6AA1		



#### **Production location**

The measuring instrument is produced at one of the following production locations:

 Landis+Gyr A.E.
 78 km National Road Athens-Corinth GR-20100 Corinth Greece















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**Certificate history:** This revision replaces the previous version.



Revision	Date	Description of the modification		
0	11-12-2023	Firmware update of the meter type E860 (f9 – rack-mounted version) with added features and OBIS code change of the FW and checksum identification to IDIS standardised OBIS codes.  New firmware version U201.05.02		
		Certificate based on OIML certificate R46/2012-A-NL1-23.01 revision 0.		
1	07-03-2023	Firmware update of the meter type E860 (f9 – rack-mounted version).  New firmware version U.201.05.03  Editorial corrections of the firmware versions.		
2	27-06-2024	Firmware update of the meter type E860 (f9 – rack-mounted version). New firmware version U.201.06.02.		
3	29-10-2024	Firmware update of the meter type E860 (f9 – rack-mounted version). New firmware version U.201.07.02. Docfolder name is aligned with OIML certificate: R46/2012-A-NL1-23.07		









