



OIML Member State
P. R. China



OIML Certificate No.
R46/2012-A-CN2-26.01 Revision 1

OIML CERTIFICATE

ISSUED UNDER SCHEME A

OIML Issuing Authority Name: National Institute of Metrology, China
Address: No.18, Bei San Huan Dong Lu, Chaoyang Dist., Beijing, P. R. China
Person responsible: Mr. Li Wentao

Applicant Name: EMSI TECHNOLOGIES HONG KONG LIMITED
Address: UNIT 2A, 17/F GLENEALY TOWER NO.1 GLENEALY CENTRAL,
HONG KONG, P.R.CHINA

Manufacturer Name: Microstar Electric Company Limited
Address: 8 Sanhong Road, Nanjing, Jiangsu, P. R. China

Identification of the certified type C2000 Single Phase Energy Meter
C2000 ①220 V 0.25-5(60) A 50 Hz
②220 V 0.25-5(100) A 50 Hz
③120 V 0.25-5(100) A 60 Hz
(Further characteristics on page 2)

This OIML 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):

OIML R46-1/-2 Edition 2012

For accuracy class: **Class B (Class 1)**

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is 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.

OIML Issuing Authority: **National Institute of Metrology, China**

Date: 31 July 2026

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The conformity was established by the results of tests and examinations provided in the associated OIML type evaluation report:

No. TER-R46/2012-CN2-26.01 dated 05 February 2026 that includes 15 pages
and the associated OIML test report:

No. SIMT2025F14-41-001 dated 12 December 2025 that includes 98 pages

OIML Certificate History

Revision No.	Date	Description of the modification
0	09 February 2026	Initial issue
1	31 July 2026	Editorial change: Change OIML R46-Edition 2012 to OIML R46-1/-2 Edition 2012.

This revision replaces the previous version.

Characteristics of the Instrument

Meter type (electromechanical/static):	Static
Accuracy class:	Class B (Class 1)
Nominal voltage, U_{nom} :	120 V, 220 V
Nominal frequency, f_{nom} :	50 Hz, 60 Hz
Maximum current, I_{max} :	60 A, 100 A
Transitional current, I_{tr} :	0.5 A
Minimum current, I_{min} :	0.25 A
Starting current, I_{st} :	0.02 A
Connection mode (phases, wires, elements):	Direct-connected Single phase two wires, one element
Direction of energy flow/registers:	Two-register, bi-directional
Register multiplier:	1
Meter constant:	3200 imp/kWh
Specified clock frequencies	32.768 kHz
Indoor / Outdoor:	Indoor
IP Rating:	IP51
Terminal arrangement (e.g.: BS, DIN):	DIN
Insulation protection class:	II
Lower specified temperature:	-25 °C
Upper specified temperature:	+70 °C
Humidity class:	H2
Tilt / Mounting position:	Any position is allowed
Hardware version(s):	hv10102_C4V2-HT5023-TR4W
Software version(s):	① Version: V1.9.035 Checksum: D1FED97A, ② Version: V1.9.036 Checksum: 07EA2CE5, ③ Version: V1.9.036 Checksum: 88D29608

Remarks: Communication interfaces: 1 optical port, 1 RS485 port