



OIML Member State  
P. R. China



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

## 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 ①220V 0.25-5(60)A 50Hz  
②220V 0.25-5(100)A 50Hz  
③120V 0.25-5(100)A 60Hz  
(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 – 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: 09 February 2026

**Li Wentao**  
Director  
National Institute of Metrology, China



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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

### 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