

## Certification No. 2048

This is to certify that the metering equipment identified as:

**Type: NW34-R08**

**Mgmt. SAP = 1 is "4C594531383230383132333435363738" (LYE1820812345678)**

**Manufactured by: JIANGSU LINYANG ENERGY CO.,LTD**

has successfully passed the DLMS/COSEM Conformance test, under the following conditions:

- CTT version: CTT 3.1 standard edition, 64bits, release 107
- Licensed to: 20161118\_Jiangsu\_Linyang\_Energy\_Co\_Ltd\_Qidong\_China (2016/11/18)
- COSEM object definitions file version: Object\_defs\_v3.3\_released\_180601.dat
- Media identifier(s): Abstract, Electricity

Tests	Comm. profile & opening mode	Application contexts	Security features	Date and time	Test Result hash value
Test 1	HDLC, DIRECT_HDLC	LONG_NAMES, LONG_NAMES_WITH_CIPHERING	SERVICE_SPECIFIC_GLO_CIPHERING, SUITE_0 SECURITY_ACTIVATE KEY_TRANSFER	14-DEC-2018 08:35:10	840D977FE83E19853B7AFD7E534518D62A1BEEB8EC86AF330EB8E1CD562D0F18
Test 2	HDLC, MODE_E			13-DEC-2018 14:42:13	336607B81B1B6EF5C4DE6006FA5793CCF31431F31EA45AD381E570D9A3AFCAD6
Test 3	TCP			14-DEC-2018 11:38:09	8E514AAA37FC5BE86402BB8CA52F7204E0CB0C2927CFDECD7B7C9AB88AA322AA

The authenticity of the test report(s) has been verified by the DLMS User Association and the metering equipment identified above is listed on its web site at: [www.dlms.com](http://www.dlms.com).

With this, the manufacturer is entitled to display the DLMS/COSEM Compliant mark – shown below – on its product duly identified and on its product literature.



The test reports are filed by the DLMS UA. Copies are available from the manufacturer.

This Certificate is only valid for the functions successfully tested; see the Summary. The test has been executed on one specimen of the product, as identified by the Management Logical Device Name reported. Results may not be applicable for other test specimens.

Date: Zug, the 15<sup>th</sup> December 2018



Gyöző Kmetyh  
President

The DLMS UA is a not for profit Association in conformance with Art. 60ff of the Swiss Civil Code.  
Commercial registration number CHE-440.972.101

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## Summary of features tested for Test 1

This section provides an overview of the features tested, aggregated over all logical devices and Application Associations in one test session. Full information is available in the Test Result.

```
*****  
* Identification *  
*****
```

```
Identification = {  
  Manufacturer = "\JIANGSU LINYANG ENERGY CO.,LTD"  
  FLAGid = "\LYE"  
  Type = "\NW34-R08"  
  SerialNr = "\12345678"  
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanism GMAC  
Dedicated Key= TRUE"  
  Comment = "\Client:A1,A2,A3,A4,A5 with HDLC"  
}
```

```
*****  
* Summary *  
*****
```

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	159	0	24	0	135	0
COSEM	4514	0	17	108	4389	0
SYMSEC	158	0	32	0	126	0
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT		All (No association with the required properties)				

```
Communication profile:          HDLC  
  
Application context names:     LONG_NAMES, LONG_NAMES_WITH_CIPHERING  
  
Authentication mechanisms:     NO_SECURITY, LOW_LEVEL_SECURITY  
                                HIGH_LEVEL_SECURITY_GMAC  
  
ACSE and xDLMS features:      ACTION, GET, SELECTIVE_ACCESS  
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET  
  
Security features:             SERVICE_SPECIFIC_GLO_CIPHERING, SUITE_0  
                                SECURITY_ACTIVATE, KEY_TRANSFER  
  
Data protection features:      (not collected)  
  
Logical device(s) found:      SAP = 1 is "4C594531383230383132333435363738"  
(LYE1820812345678)  
  
Active firmware(s):           Id=R11.8 2018-11-26  
                                Id=RFWAN_4G_SIM7100E_SM_002554V2_20181128  
                                Id=181125F2 , Id=002491V3 , Id=002554V2  
  
COSEM classes tested:         1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 19 (1), 20  
                                22, 23 (1), 29, 30, 40, 41, 42, 43, 44, 45, 64, 70, 80  
                                81, 82, 83, 84, 85, 86  
  
COSEM classes found but not tested: 28 (1), 47 (1)
```

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## Summary of features tested for Test 2

This section provides an overview of the features tested, aggregated over all logical devices and Application Associations in one test session. Full information is available in the Test Result.

```
*****
* Identification *
*****

Identification = {
  Manufacturer = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\NW34-R08"
  SerialNr = "\12345678"
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanism GMAC
Dedicated Key= TRUE"
  Comment = "\Client:A1,A2,A3,A4,A5 with MODE E"
}
```

```
*****
* Summary *
*****
```

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	159	0	24	0	135	0
COSEM	4500	0	17	112	4371	0
SYMSEC	158	0	32	0	126	0
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT		All (No association with the required properties)				

```
Communication profile:          HDLC

Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Authentication mechanisms:      NO_SECURITY, LOW_LEVEL_SECURITY
                                HIGH_LEVEL_SECURITY_GMAC

ACSE and xDLMS features:       ACTION, GET, SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:              SERVICE_SPECIFIC_GLO_CIPHERING, SUITE_0
                                SECURITY_ACTIVATE, KEY_TRANSFER

Data protection features:       (not collected)

Logical device(s) found:        SAP = 1 is "4C594531383230383132333435363738"
(LYE1820812345678)

Active firmware(s):             Id=R11.8 2018-11-26
                                Id=RFWAN_4G_SIM7100E_SM_002554V2_20181128
                                Id=181125F2 , Id=002491V3 , Id=002554V2

COSEM classes tested:           1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 19 (1), 20
                                22, 23 (1), 29, 30, 40, 41, 42, 43, 44, 45, 64, 70, 80
                                81, 82, 83, 84, 85, 86

COSEM classes found but not tested: 28 (1), 47 (1)
```

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## Summary of features tested for Test 3

This section provides an overview of the features tested, aggregated over all logical devices and Application Associations in one test session. Full information is available in the Test Result.

```
*****
* Identification *
*****

Identification = {
  Manufacturer = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\NW34-R08"
  SerialNr = "\12345678"
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanism GMAC
Dedicated Key= TRUE"
  Comment = "\Client:A1,A2,A3,A4,A5 with TCP"
}
```

```
*****
* Summary *
*****
```

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (Communication profile not HDLC)				
APPL	159	0	23	0	136	0
COSEM	4514	0	17	108	4389	0
SYMSEC	158	0	32	0	126	0
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT		All (No association with the required properties)				

```
Communication profile:          TCP

Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Authentication mechanisms:      NO_SECURITY, LOW_LEVEL_SECURITY
                                HIGH_LEVEL_SECURITY_GMAC

ACSE and xDLMS features:       ACTION, GET, RLRQ_RLRE, SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:              SERVICE_SPECIFIC_GLO_CIPHERING, SUITE_0
                                SECURITY_ACTIVATE, KEY_TRANSFER

Data protection features:       (not collected)

Logical device(s) found:        SAP = 1 is "4C594531383230383132333435363738"
(LYE1820812345678)

Active firmware(s):             Id=R11.8 2018-11-26
                                Id=RFWAN_4G_SIM7100E_SM_002554V2_20181211
                                Id=181125F2 , Id=002491V3 , Id=002554V2

COSEM classes tested:           1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 19 (1), 20
                                22, 23 (1), 29, 30, 40, 41, 42, 43, 44, 45, 64, 70, 80
                                81, 82, 83, 84, 85, 86

COSEM classes found but not tested: 28 (1), 47 (1)
```