

Certification No. 2169

This is to certify that the metering equipment identified as:

Type: N12U02 Active firmware(s): Id=E.N12U02.MM.003275.L1.00.00 S=460B
Mgmt. SAP = 1 is "4155584E3132553032" (AUXN12U02)
Manufactured by: Ningbo Sanxing Smart Electric 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: Ningbo_Sanxing_Smart_Electric_Co_Ltd (2016-11-21)
- 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	–	13-AUG-2019 20:34:23	47B43A7C532FF7F52D3AE65C793BB7813 7802251E18AF53AB79D1E8DFF2881BA
Test 2	HDLC, MODE_E	LONG_NAMES	–	13-AUG-2019 20:58:48	24E57AAEBFEB30B2061230D23EF407544 8F963D93C2E06F1D7266BDD7195485F

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.

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.



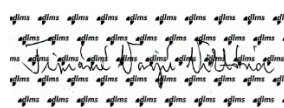
The test reports are filed by the DLMS UA. Copies are available from the manufacturer.

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 14th August 2019



Gyöző Kmethy
President



Viktória Varjú Timárné
Certification Engineer

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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 = "\Ningbo Sanxing Smart Electric Co.,Ltd."  
  FLAGid = "\AUX"  
  Type = "\N12U02"  
  IUTIsModule = FALSE  
  SerialNr = "\12345678"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	----	-----	-----	-----	-----	-----
HDLC	36	0	4	0	32	0
APPL	57	0	19	0	38	0
COSEM	4730	0	2	43	4685	0
SYMSEC		All (No ciphered association with the required properties)				
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  
Authentication mechanisms:     NO_SECURITY,LOW_LEVEL_SECURITY  
ACSE and xDLMS features:      GET,SERVICE_SPECIFIC_BLOCK_TRANSFER,SET  
Security features:             (not collected)  
Data protection features:      (not collected)  
Logical device(s) found:       SAP = 1 is "4155584E3132553032" (AUXN12U02)  
Active firmware(s):           Id=E.N12U02.MM.003275.L1.00.00 S=460B  
COSEM classes tested:          1,3,15(1),17  
COSEM classes found but not tested: (none)
```

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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 = "\Ningbo Sanxing Smart Electric Co.,Ltd."
  FLAGid = "\AUX"
  Type = "\N12U02"
  IUTIsModule = FALSE
  SerialNr = "\12345678"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	57	0	19	0	38	0
COSEM	4730	0	2	43	4685	0
SYMSEC		All (No ciphered association with the required properties)				
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
Authentication mechanisms:     NO_SECURITY,LOW_LEVEL_SECURITY
ACSE and xDLMS features:      GET,SERVICE_SPECIFIC_BLOCK_TRANSFER,SET
Security features:             (not collected)
Data protection features:      (not collected)
Logical device(s) found:       SAP = 1 is "4155584E3132553032" (AUXN12U02)
Active firmware(s):           Id=E.N12U02.MM.003275.L1.00.00 S=460B
COSEM classes tested:          1,3,15(1),17
COSEM classes found but not tested: (none)
```