DLMS User Association

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Certification No. 2263

This is to certify that the metering equipment identified as:

Type: WSA310-P02   Active firmware(s): Id=WSA310-P02METER.0333.V1.0.1 S=89F3
Mgmt. SAP = 1 is "57534732303230373230333030303033" (WSG2020720300003)
Manufactured by: Zhejiang WELLSUN Intelligent Technology 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: 20190912_ZWIT_Zhejiang (2019-09-12)
- 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	GENERAL_GLO_ CIPHERING SERVICE_SPECIFIC_ GLO_CIPHERING, SUITE_0 SECURITY_ACTIVATE KEY_TRANSFER	13-JAN-2020 15:25:10	10A66D2AB2F97ABD12E45A80451EF7033 AC4C24D062FB37E3CCB29628B409F89
Test 2	TCP			12-JAN-2020 21:01:50	A7DC4BA5B686CF7D0DFA6EBF9B8BDCA 119FA74329C37E7DB4C7286AB36A30319
Test 3	HDLC, MODE_E			12-JAN-2020 18:15:45	BFD169C0D2BE9350D8D4DF0162E06F5B4 8001CCB98E260058846D2D97A8BB16F

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.
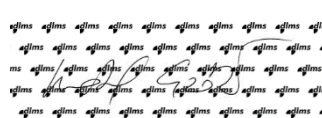
dlms
COSEM
Compliant

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.
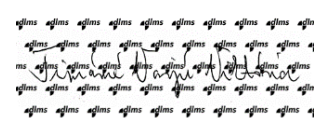
Date: Zug, the 13th January 2020

Sergio Lazzarotto
Executive Director and President

Győző Kmethy
President Emeritus

Viktória Varjú Timárné
Certification Engineer

Certification No. 2263

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 = "\Zhejiang WELLSUN Intelligent Technology Co.,Ltd."
  FLAGid = "\WSG"
  Type = "\WSA310-P02"
  ConfigurationId = "\ConfigurationId"
  SerialNr = "20300003"
  Comment = "\comment 1"
  Comment = "\comment N"
}

***********
* Summary *
***********

TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC    36      0         4              0              32       0
APPL    75      0         20             0              55       0
COSEM   18777   0         14             169            18594    0
SYMSEC  39      0         9              0              30       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,MULTIPLE_REFERENCES,RLRQ_RLRE
                                    SERVICE_SPECIFIC_BLOCK_TRANSFER,SET

Security features:                  GENERAL_GLO_CIPHERING
                                    SERVICE_SPECIFIC_GLO_CIPHERING,SUITE_0
                                    SECURITY_ACTIVATE,KEY_TRANSFER

Data protection features:           (not collected)

Logical device(s) found:
                                    SAP = 1 is "57534732303230373230333030303033"
(WSG2020720300003)

Active firmware(s):                 Id=WSA310-P02METER.0333.V1.0.1 S=89F3

COSEM classes tested:               1,3,4,5,6,7(1),8,9,11,15(1),17,18,20,21,22
                                    23(1),27(1),28(2),29(2),30,40,41,42,44,45
                                    64,70,71


COSEM classes found but not tested: (none)
```

Certification No. 2263

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 = "\Zhejiang WELLSUN Intelligent Technology Co.,Ltd."
  FLAGid = "\WSG"
  Type = "\WSA310-P02"
  ConfigurationId = "\ConfigurationId"
  SerialNr = "20300003"
  Comment = "\comment 1"
  Comment = "\comment N"
}


***********
* Summary *
***********


TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC            All(Communication profile not HDLC)
APPL    75      0         19             0              56       0
COSEM   18777   0         14             169            18594    0
SYMSEC  39      0         9              0              30       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,MULTIPLE_REFERENCES,RLRQ_RLRE
                                 SERVICE_SPECIFIC_BLOCK_TRANSFER,SET

Security features:               GENERAL_GLO_CIPHERING
                                 SERVICE_SPECIFIC_GLO_CIPHERING,SUITE_0
                                 SECURITY_ACTIVATE,KEY_TRANSFER

Data protection features:        (not collected)

Logical device(s) found:
                                 SAP = 1 is "5753470000323037323033303030303033" (WSG)

Active firmware(s):              Id=WSA310-P02METER.0333.V1.0.1 S=89F3

COSEM classes tested:            1,3,4,5,6,7(1),8,9,11,15(1),17,18,20,21,22
                                 23(1),27(1),28(2),29(2),30,40,41,42,44,45
                                 64,70,71


COSEM classes found but not tested: (none)
```

The DLMS UA is 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 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 = "\Zhejiang WELLSUN Intelligent Technology Co.,Ltd."
  FLAGid = "\WSG"
  Type = "\WSA310-P02"
  ConfigurationId = "\ConfigurationId"
  SerialNr = "20300003"
  Comment = "\comment 1"
  Comment = "\comment N"
}

***********
* Summary *
***********

TYPE    TOTAL   SKIPPED  INAPPLICABLE  INCONCLUSIVE  PASSED   FAILED
----    -----   -------  ------------  ------------  ------   ------
HDLC            All(MODE_E)
APPL    75      0        20            0             55       0
COSEM   18777   0        14            169           18594    0
SYMSEC  39      0        9             0             30       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,MULTIPLE_REFERENCES,RLRQ_RLRE
                                 SERVICE_SPECIFIC_BLOCK_TRANSFER,SET

Security features:               GENERAL_GLO_CIPHERING
                                 SERVICE_SPECIFIC_GLO_CIPHERING,SUITE_0
                                 SECURITY_ACTIVATE,KEY_TRANSFER

Data protection features:        (not collected)

Logical device(s) found:
                                 SAP = 1 is "575347000032303732303330303033" (WSG)

Active firmware(s):              Id=WSA310-P02METER.0333.V1.0.1 S=89F3

COSEM classes tested:            1,3,4,5,6,7(1),8,9,11,15(1),17,18,20,21,22
                                 23(1),27(1),28(2),29(2),30,40,41,42,44,45
                                 64,70,71

COSEM classes found but not tested:  (none)
```

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