DLMS User Association

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Certification No. 2312

This is to certify that the metering equipment identified as:

Type: EDM-GENIUS-Mk6Es   Active firmware(s): Id=6.02A V=23912
Mgmt. SAP = 1 is "45444D2D47454E4955532D4D6B364573" (EDM-GENIUS-Mk6Es)
Manufactured by: EDMI

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

- CTT version: CTT 3.1 extended edition, 64bits, release 107
- Licensed to: 20160729_EDMI_LTD (29/7/2016)
- COSEM object definitions file version: Object_defs_v3.6_Released_2_20200102.dat
- Media identifier(s): Abstract, Electricity

Tests	Comm. profile & opening mode	Application contexts	Security features	Date and time	Test Result hash value
Test 1 suite 1	HDLC, DIRECT_HLC	LONG_NAMES, LONG_NAMES _WITH_ CIPHERING	GENERAL_GLO_CIPHERING GENERAL_SIGNING SERVICE_SPECIFIC_GLO_ CIPHERING, SUITE_1 SECURITY_ACTIVATE, KEY_TRANSFER	18-MAR-2020 14:45:32	B32256C05347CAD2001DF13D361462E0B CE8064BDE4331A6EB5EEF3131ED596B
Test 2 suite 0				19-MAR-2020 12:38:14	628C5A573910FD864A5387B0D98D63D0 A7A16D532D365875D23B048A95F72345
Test 3 suite 1	TCP			17-MAR-2020 16:22:09	9AB7FF95A0E6A282F2E90FC26ED8A914 5FE3C60141EAE0D96D48E4A5D1EED17E
Test 4 suite 0				17-MAR-2020 15:15:01	49C16CE845115DE55F27444197C07F08A D2A3DB2F6B1ED69B7123A48A8E100F7

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 20th March 2020

Sergio Lazzarotto
Executive Director and President

Győző Kmethy
President Emeritus

Viktória Varjú
Certification Engineer

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Commercial registration number CHE-440.972.101

Certification No. 2312

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 = "\EDMI"
  FLAGid = "\EDM"
  Type = "\EDM-GENIUS-Mk6Es"
  SerialNr = "\9300000"
  Comment = "\Mk6Es polyphase meter"
  Comment = "\EDMI-meters"
}

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

TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC    36      0         1              0              35       0
APPL    58      0         16             0              42       0
COSEM   2758    0         16             28             2714     0
SYMSEC          All (No ciphered association with the required properties)
PUBSEC  46      0         7              0              39       0
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,HIGH_LEVEL_SECURITY_ECDSA

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

Security features:                 GENERAL_GLO_CIPHERING,GENERAL_SIGNING
                                   SERVICE_SPECIFIC_GLO_CIPHERING,SUITE_1
                                   SECURITY_ACTIVATE,KEY_TRANSFER

Data protection features:          (not collected)

Logical device(s) found:
                                   SAP = 1 is "45444D2D47454E4955532D4D6B364573" (EDM-GENIUS-
Mk6Es)

Active firmware(s):                Id=6.02A V=23912

COSEM classes tested:              1,3,4,5,6,7(1),8,9,11,15(3),17,18,19(1),20
                                   21,22,23(1),27(1),28(2),29(2),40,41,42,43
                                   44,45,48,64(1),70,71

COSEM classes found but not tested: 100
```

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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 = "\EDMI"
  FLAGid = "\EDM"
  Type = "\EDM-GENIUS-Mk6Es"
  SerialNr = "\9300000"
  Comment = "\Mk6Es polyphase meter"
  Comment = "\EDMI-meters"
}

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


TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC    36      0         1              0              35       0
APPL    88      0         20             0              68       0
COSEM   5516    0         32             56             5428     0
SYMSEC  78      0         12             0              66       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
                                  SELECTIVE_ACCESS
                                  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 "45444D2D47454E4955532D4D6B364573" (EDM-GENIUS-
Mk6Es)

Active firmware(s):               Id=6.02A V=23912

COSEM classes tested:             1,3,4,5,6,7(1),8,9,11,15(3),17,18,19(1),20
                                  21,22,23(1),27(1),28(2),29(2),40,41,42,43
                                  44,45,48,64(1),70,71

COSEM classes found but not tested: 100
```

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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 = "\EDMI"
  FLAGid = "\EDM"
  Type = "\EDM-GENIUS-Mk6Es"
  SerialNr = "\9300000"
  Comment = "\Mk6Es polyphase meter"
  Comment = "\EDMI-meters"
}

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

TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC            All(Communication profile not HDLC)
APPL    58      0         15             0              43       0
COSEM   2758    0         16             28             2714     0
SYMSEC          All (No ciphered association with the required properties)
PUBSEC  46      0         7              0              39       0
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,HIGH_LEVEL_SECURITY_ECDSA

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

Security features:                GENERAL_GLO_CIPHERING,GENERAL_SIGNING
                                  SERVICE_SPECIFIC_GLO_CIPHERING,SUITE_1
                                  SECURITY_ACTIVATE,KEY_TRANSFER

Data protection features:         (not collected)

Logical device(s) found:
                                  SAP = 1 is "45444D2D47454E4955532D4D6B364573" (EDM-GENIUS-
Mk6Es)

Active firmware(s):               Id=6.02A V=23912

COSEM classes tested:             1,3,4,5,6,7(1),8,9,11,15(3),17,18,19(1),20
                                  21,22,23(1),27(1),28(2),29(2),40,41,42,43
                                  44,45,48,64(1),70,71

COSEM classes found but not tested: 100
```

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Summary of features tested for Test 4

```
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 = "\EDMI"
  FLAGid = "\EDM"
  Type = "\EDM-GENIUS-Mk6Es"
  SerialNr = "\9300000"
  Comment = "\Mk6Es polyphase meter"
  Comment = "\EDMI-meters"
}

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

TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC            All(Communication profile not HDLC)
APPL    88      0         19             0              69       0
COSEM   5516    0         32             56             5428     0
SYMSEC  78      0         12             0              66       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
                                    SELECTIVE_ACCESS
                                    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 "45444D2D47454E4955532D4D6B364573" (EDM-GENIUS-
Mk6Es)

Active firmware(s):                 Id=6.02A V=23912

COSEM classes tested:               1,3,4,5,6,7(1),8,9,11,15(3),17,18,19(1),20
                                    21,22,23(1),27(1),28(2),29(2),40,41,42,43
                                    44,45,48,64(1),70,71

COSEM classes found but not tested: 100
```

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