DLMS UserAssociation

Bahnhofstrasse 28
CH-6304 Zug
Switzerland

Tel. +36 28 514 065
Fax +36 28 514 066
dlms@dlms.com

device
language ™
message
specification

Certification No. 1817

This is to certify that the metering equipment identified as:

Type: IRANTECH300 DC

Mgmt. Logical Device Name: SAP = 1 is "4858453030333037303030303030303031" (HXE0030700000001)

Manufactured by: HEXING Electrical Co. Ltd.

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

- CTT version: CTT 3.0 standard edition, 64bits (108)
- Licensed to: 20160314_HEXING_Electrical_Co_Ltd_CHI (2016/3/14)
- COSEM object definitions file version: Object_defs_v3.0_Released_170127.dat
- Media identifier(s): Abstract, Electricity

Tests	Comm. profile & opening mode	Application contexts	Security features	Date and time	Test Result hash value
Test 1 GPRS	TCP	LONG_NAMES_WITH_CIPHERING	ACTIVATE_SECURITY_POLICY, GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING, KEY_TRANSFER	29-APR-2017 08:45:39	889BE3736B52C463206E7B9D CA95E7D9FD8F9BA6DA67EB9 D2F3E2BA326D15CC1
Test 2 optical	HDLC	LONG_NAMES, LONG_NAMES_WITH_CIPHERING	GENERAL_DED_CIPHERING,GENERAL_GLO_CIPHERING	28-APR-2017 18:48:20	ED6A997083B6BA48A3B5E784 DFED6D8E957D63D15ADA599 8E959C29E3D31E6C9
Test 3 RS485	HDLC	LONG_NAMES, LONG_NAMES_WITH_CIPHERING	GENERAL_DED_CIPHERING,GENERAL_GLO_CIPHERING	28-APR-2017 20:26:54	8E055E96F7CAA0BF626C2396 B8E24CE8E57A6B6E08206A67 90A2436C7462E7D1

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.

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 12th May 2017

Győző Kmethy
President

Certification No. 1817

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 = "\HEXING Electrical Co. Ltd."
  FLAGid = "\HXE"
  Type = "\IRANTECH300 DC"
  IUTIsModule = FALSE
  SerialNr = "\00000001"
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanisem GMAC
Dedicated Key= TRUE"
  Comment = "\Client:Management for TCP"
}

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

TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC            All(Communication profile not HDLC)
APPL    33      0         17             0              16       0
COSEM   1873    0         2              52             1819     0
SYMSEC  81      0         10             0              71       0


Communication profile:            TCP

Application context names:        LONG_NAMES_WITH_CIPHERING

Security mechanisms:              HIGH_LEVEL_SECURITY_GMAC

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

Security features:                ACTIVATE_SECURITY_POLICY
                                  GENERAL_DED_CIPHERING,GENERAL_GLO_CIPHERING
                                  KEY_TRANSFER

Logical device(s) found:
                                  SAP = 1 is "4858453030333037303030303030303031"
(HXE0030700000001)

COSEM classes tested:             1,3,4,5,6,7(1),8,9,11,15(1),17,18,19(1),20
                                  21,22,23(1),27(1),28(2),29(2),40,41,42,43
                                  44,45,64,70,71,72,74


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

Certification No. 1817

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 = "\HEXING Electrical Co. Ltd."
  FLAGid = "\HXE"
  Type = "\IRANTECH300 DC"
  IUTIsModule = FALSE
  SerialNr = "\00000001"
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanisem GMAC
Dedicated Key= TRUE"
  Comment = "\Client:Public,Management,reading for Optical"
}

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

TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC            All(MODE_E)
APPL    66      0         11             0              55       0
COSEM   5647    0         74             98             5475     0
SYMSEC  71      0         24             0              47       0


Communication profile:              HDLC

Application context names:          LONG_NAMES,LONG_NAMES_WITH_CIPHERING

Security mechanisms:                NO_SECURITY,HIGH_LEVEL_SECURITY_GMAC

ACSE and xDLMS features:            GENERAL_BLOCK_TRANSFER,GET
                                    MULTIPLE_REFERENCES,RLRQ_RLRE
                                    SELECTIVE_ACCESS
                                    SERVICE_SPECIFIC_BLOCK_TRANSFER

Security features:                  GENERAL_DED_CIPHERING,GENERAL_GLO_CIPHERING

Logical device(s) found:
                                    SAP = 1 is "48584530303330373030303030303031"
(HXE0030700000001)

COSEM classes tested:               1,3,4,5,6,7(1),8,9,11,15(1),17,18,19(1),20
                                    21,22,23(1),27(1),28(2),29(2),40,41,42,43
                                    44,45,64,70,71,72,74

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

Certification No. 1817

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 = "\HEXING Electrical Co. Ltd."
  FLAGid = "\HXE"
  Type = "\IRANTECH300 DC"
  IUTIsModule = FALSE
  SerialNr = "\00000001"
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanisem GMAC
Dedicated Key= TRUE"
  Comment = "\Client:Public,Management,reading for RS485"
}

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

TYPE    TOTAL   SKIPPED   INAPPLICABLE   INCONCLUSIVE   PASSED   FAILED
----    -----   -------   ------------   ------------   ------   ------
HDLC    36      0         1              0              35       0
APPL    66      0         11             0              55       0
COSEM   5653    0         74             96             5483     0
SYMSEC  71      0         24             0              47       0


Communication profile:          HDLC

Application context names:      LONG_NAMES,LONG_NAMES_WITH_CIPHERING

Security mechanisms:            NO_SECURITY,HIGH_LEVEL_SECURITY_GMAC

ACSE and xDLMS features:        GENERAL_BLOCK_TRANSFER,GET
                                MULTIPLE_REFERENCES,RLRQ_RLRE
                                SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER

Security features:              GENERAL_DED_CIPHERING,GENERAL_GLO_CIPHERING

Logical device(s) found:
                                SAP = 1 is "4858453030333037303030303030303031"
(HXE0030700000001)

COSEM classes tested:           1,3,4,5,6,7(1),8,9,11,15(1),17,18,19(1),20
                                21,22,23(1),27(1),28(2),29(2),40,41,42,43
                                44,45,64,70,71,72,74


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