

Certification No. 1906

This is to certify that the metering equipment identified as:

Type: HXE130

Mgmt. Logical Device Name: SAP = 1 is "48584530303130373330303030303031" (HXE0010730000001)

Manufactured by: Hexing Electrical Co.,Ltd.

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

- CTT version: CTT 3.0 extended edition, 64bits (109)
- Licensed to: 20160314_HEXING_Electrical_Co_Ltd_CHI (2016/3/14)
- COSEM object definitions file version: Object_defs_v3.1_released_170313.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, LONG_NAMES_WITH _CIPHERING	ACTIVATE_SECURITY_POLICY, GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING, KEY_TRANSFER	04-DEC- 2017 09:19:17	35B490137FE4238BDFE52DD44B 7E861708D9FB72D45F410577BF6 B834D8148EE
Test 2 optical	HDLC	LONG_NAMES, LONG_NAMES_WITH _CIPHERING	GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING	01-DEC- 2017 15:25:49	7E78F358AFFB6FF561F3E302A6 A0875E3129F1248226773135EF11 FEAAF403A8
Test 3 RS485	HDLC	LONG_NAMES, LONG_NAMES_WITH _CIPHERING	GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING	01-DEC- 2017 15:59:07	0B708F1138012FFAB16891201A2 9C5CE0C359B34E5511C92B65C5 6283967BD1A

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 12th December 2017



Gyöző Kmethy
President

Certification No. 1906

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 = "\HXE130"
  IUTisModule = FALSE
  SerialNr = "\30000001"
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanism GMAC
Dedicated Key= TRUE"
  Comment = "\Client:Public,Management for TCP"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All(Communication profile not HDLC)				
APPL	49	0	10	0	39	0
COSEM	1149	0	8	26	1115	0
SYMSEC	74	0	16	0	58	0

```
Communication profile:          TCP

Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Security mechanisms:            NO_SECURITY, HIGH_LEVEL_SECURITY_GMAC

ACSE and xDLMS features:       ACTION, 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 "48584530303130373330303030303031"
(HXE0010730000001)

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

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

Certification No. 1906

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 = "\HXE130"
  IUTisModule = FALSE
  SerialNr = "\30000001"
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanism GMAC
Dedicated Key= TRUE"
  Comment = "\Client:Public,Management for Optical"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
HDLC	36	0	1	0	35	0
APPL	49	0	10	0	39	0
COSEM	1149	0	8	26	1115	0
SYMSEC	55	0	22	0	33	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:       ACTION, GET, MULTIPLE_REFERENCES, RLRQ_RLRE
                                SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:              GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING

Logical device(s) found:        SAP = 1 is "48584530303130373330303030303031"
                                (HXE0010730000001)

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

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

Certification No. 1906

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 = "\HXE130"  
  IUTIsModule = FALSE  
  SerialNr = "\30000001"  
  Comment = "\Application Context: LN_WITH-CIPHERING, Authentication mechanism GMAC  
Dedicated Key= TRUE"  
  Comment = "\Client:Public,Management for RS485"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
HDLC	36	0	1	0	35	0
APPL	49	0	10	0	39	0
COSEM	1149	0	8	26	1115	0
SYMSEC	55	0	22	0	33	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: ACTION, GET, MULTIPLE_REFERENCES, RLRQ_RLRE  
SELECTIVE_ACCESS  
SERVICE_SPECIFIC_BLOCK_TRANSFER, SET  
Security features: GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING  
Logical device(s) found: SAP = 1 is "48584530303130373330303030303031"  
(HXE0010730000001)  
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  
COSEM classes found but not tested: (none)
```