

Certification No. 2233

This is to certify that the metering equipment identified as:

**Type: DTZ1513(MBS410K2A) Active firmware(s): Id=SDA1-3D-190929 S=34AC7972
Id=7F-EMU-19092801 S=D789A179
Id=DLMSLIB-V02.07 S=V02.07**

Mgmt. SAP = 1 is "49484D30303330373930303436333230" (IHM0030790046320)

Manufactured by: INHEMETER 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: 20120917_Shenzhen_Inhemeter_Shenzhen_China (2012-09-17)
- 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_CI IPHERING, SUITE_0 SECURITY_ACTIVATE, KEY_TRANSFER	31-OCT-2019 11:45:46	BC7DE545A7D868D6A4AB42A046B40133 30517DD0C1DE3C9D4F45238562253E10
Test 2 IR	HDLC, MODE_E			31-OCT-2019 13:47:37	BBBBBEFD86867D3F5297EB706DC899F86 BA020171A96E732E83410139EB896848
Test 3	TCP			30-OCT-2019 16:45:55	B3EF2817C2F6C934F1298C2594B08D3E9 E2C6DFE8A6DE8E3B735F9CF105FCA1B

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 15th November 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 = "\INHEMETER CO.,LTD."
  FLAGid = "\IHM"
  Type = "\DTZ1513(MBS410K2A)"
  ConfigurationId = "\ConfigurationId"
  SerialNr = "\037990046320"
  Comment = "\Smart meter"
}
```

* Summary *

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	6646	0	8	54	6584	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, HIGH_LEVEL_SECURITY_GMAC

ACSE and xDLMS features: ACTION, GET, MULTIPLE_REFERENCES
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	"49484D30303330373930303436333230"
(IHM0030790046320)				
SAP	=	16	is	"49484D31303330373930303436333230"
(IHM1030790046320)				

Active firmware(s): Id=SDA1-3D-190929 S=34AC7972
Id=7F-EMU-19092801 S=D789A179
Id=DLMSLIB-V02.07 S=V02.07

COSEM classes tested: 1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 20, 21, 22
23 (1), 40, 41, 48, 64 (1), 70, 71, 111, 112, 113, 115

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 = "\INHEMETER CO.,LTD."
  FLAGid = "\IHM"
  Type = "\DTZ1513(MBS410K2A)"
  ConfigurationId = "\ConfigurationId"
  SerialNr = "\037990046320"
  Comment = "\Smart meter"
}
```

* Summary *

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	71	0	18	0	53	0
COSEM	6646	0	8	54	6584	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, HIGH_LEVEL_SECURITY_GMAC

ACSE and xDLMS features: ACTION, GET, MULTIPLE_REFERENCES
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	"49484D30303330373930303436333230"
(IHM0030790046320)				
SAP	=	16	is	"49484D31303330373930303436333230"
(IHM1030790046320)				

Active firmware(s): Id=SDA1-3D-190929 S=34AC7972
Id=7F-EMU-19092801 S=D789A179
Id=DLMSLIB-V02.07 S=V02.07

COSEM classes tested: 1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 20, 21, 22
23 (1), 40, 41, 48, 64 (1), 70, 71, 111, 112, 113, 115

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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 = "\INHEMETER CO.,LTD."
  FLAGid = "\IHM"
  Type = "\DTZ1513(MBS410K2A)"
  ConfigurationId = "\ConfigurationId"
  SerialNr = "\037990046320"
  Comment = "\Smart meter"
}
```

* Summary *

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All(Communication profile not HDLC)				
APPL	71	0	17	0	54	0
COSEM	6637	0	8	54	6575	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, 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	"49484D30303330373930303436333230"
(IHM0030790046320)				
SAP	=	16	is	"49484D31303330373930303436333230"
(IHM1030790046320)				

Active firmware(s): Id=SDA1-3D-190929 S=34AC7972
Id=7F-EMU-19092801 S=D789A179
Id=DLMSLIB-V02.07 S=V02.07

COSEM classes tested: 1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 20, 21, 22
40, 41, 48, 64 (1), 70, 71, 111, 112, 113, 115

COSEM classes found but not tested: (none)