

## Certification No. 2344

This is to certify that the metering equipment identified as:

**Type: MA309MH4LSA Active firmware(s): Id=P2017 2020-04-21 S=AC642855  
Id=100A1016 S=57346EBA**

**Mgmt. SAP = 1 is "4B464D323032303830303030303132" (KFM202080000012)**

**Manufactured by: ShenZhen Kaifa Technology(Chengdu)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: 20170421\_Shenzhen\_Kaifa\_Technology\_Chengdu\_Co\_Ltd\_Shenzen\_CHINA (2017/4/21)
- 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 RS485	HDLC, DIRECT_HDLC	LONG_NAMES, LONG_NAMES _WITH_ CIPHERING	SERVICE_SPECIFIC_DED _CIPHERING SERVICE_SPECIFIC_GLO _CIPHERING, SUITE_0 KEY_TRANSFER	22-APR-2020 20:56:07	ED414EC0F66EBCE5AA5BBBA35415 626AC34A23D5B5D2A968A218BFE5E F75A485
Test 2 IR	HDLC, MODE_E			22-APR-2020 14:04:34	08EF832780ABC299E7EFF7EFB0BC8 C999CEC3662454BD6C418366DE5A FDBC32
Test 3 TCP	TCP			23-APR-2020 10:56:06	CD3BABAFF50D5BCFB671890794BC 8300556538AD3AD2502A83C85D1B1 31A3995

This MA309MH4LSA meter device type has already been certified as Cert. No. 2292 at 28<sup>th</sup> February 2020 without dedicated key security feature.

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](http://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 14<sup>th</sup> May 2020



**Sergio Lazzarotto**  
Executive Director and President



**Gyöző Kmethy**  
President Emeritus



**Viktória Varjú**  
Certification Engineer

The DLMS UA is a not for profit Association 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 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 = "\ShenZhen Kaifa Technology(Chengdu)Co.,Ltd."  
  FLAGid = "\KFM"  
  Type = "\MA309MH4LSA"  
  IUTIsModule = FALSE  
  SerialNr = "\00000012"  
  Comment = "\FOR CAMEL METER DLMS TEST"  
  Comment = "\NO"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	162	0	31	0	131	0
COSEM	67937	0	82	8985	58870	0
SYMSEC	58	0	10	0	48	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: SERVICE\_SPECIFIC\_DED\_CIPHERING  
SERVICE\_SPECIFIC\_GLO\_CIPHERING, SUITE\_0  
KEY\_TRANSFER

Data protection features: (not collected)

Logical device(s) found: SAP = 1 is "4B464D32303230383030303030303132"  
(KFM2020800000012)

Active firmware(s): Id=P2017 2020-04-21 S=AC642855  
Id=100A1016 S=57346EBA

COSEM classes tested: 1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 19 (1), 20  
22, 23 (1), 29 (2), 30, 40, 41, 42, 44, 45, 48, 64, 70  
74

COSEM classes found but not tested: 47 (1)

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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 = "\ShenZhen Kaifa Technology(Chengdu)Co.,Ltd."  
  FLAGid = "\KFM"  
  Type = "\MA309MH4LSA"  
  IUTIsModule = FALSE  
  SerialNr = "\00000012"  
  Comment = "\FOR CAMEL METER DLMS TEST"  
  Comment = "\NO"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	162	0	31	0	131	0
COSEM	67986	0	82	8971	58933	0
SYMSEC	58	0	10	0	48	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: SERVICE\_SPECIFIC\_DED\_CIPHERING  
SERVICE\_SPECIFIC\_GLO\_CIPHERING, SUITE\_0  
KEY\_TRANSFER

Data protection features: (not collected)

Logical device(s) found: SAP = 1 is "4B464D32303230383030303030303132"  
(KFM202080000012)

Active firmware(s): Id=P2017 2020-04-21 S=AC642855  
Id=100A1016 S=57346EBA

COSEM classes tested: 1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 19 (1), 20  
22, 23 (1), 29 (2), 30, 40, 41, 42, 44, 45, 48, 64, 70  
74

COSEM classes found but not tested: 47 (1)

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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 = "\ShenZhen Kaifa Technology(Chengdu)Co.,Ltd."  
  FLAGid = "\KFM"  
  Type = "\MA309MH4LSA"  
  IUTIsModule = FALSE  
  SerialNr = "\00000012"  
  Comment = "\FOR CAMEL METER DLMS TEST"  
  Comment = "\NO"  
}
```

\*\*\*\*\*  
\* Summary \*  
\*\*\*\*\*

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All(Communication profile not HDLC)				
APPL	162	0	30	0	132	0
COSEM	68021	0	82	8961	58978	0
SYMSEC	58	0	10	0	48	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: SERVICE\_SPECIFIC\_DED\_CIPHERING  
SERVICE\_SPECIFIC\_GLO\_CIPHERING, SUITE\_0  
KEY\_TRANSFER

Data protection features: (not collected)

Logical device(s) found: SAP = 1 is "4B464D32303230383030303030303132"  
(KFM2020800000012)

Active firmware(s): Id=P2017 2020-04-21 S=AC642855  
Id=100A1016 S=57346EBA  
Id=LE11B01SIM7600M11\_A\_CUS\_KF

COSEM classes tested: 1, 3, 4, 5, 6, 7 (1), 8, 9, 11, 15 (1), 17, 18, 19 (1), 20  
22, 23 (1), 29 (2), 30, 40, 41, 42, 44, 45, 48, 64, 70  
74

COSEM classes found but not tested: 47 (1)