

Certification No. 2333

This is to certify that the metering equipment identified as:

**Type: LY-SM300 CT Active firmware(s): Id=M00001 S=4215 Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
Id=190924 S=C078 S=C068 S=C058**

Mgmt. SAP = 1 is "4C594530303430373132333435363738" (LYE0040712345678)

Manufactured by: JIANGSU LINYANG ENERGY 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: 20161118_Jiangsu_Linyang_Energy_Co_Ltd_Qidong_China (2016/11/18)
- 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 GMAC	HDLC, MODE_E PORT	LONG_NAMES, LONG_NAMES _WITH_ CIPHERING	GENERAL_GLO_ CIPHERING SERVICE_SPECIFIC_ GLO_CIPHERING, SUITE_0	08-APR-2020 10:52:41	A04C6AE64B735EF131108F8CADE9E0D9C59 A1D16A6B094CBDEE1C6DB328078E1		
Test 2 GMAC				08-APR-2020 15:09:01	EE503E35174A78CAE8593AD0D15058BF06A FF7B1A95AE28312BF132806EAC4B8		
Test 3 GMAC				13-APR-2020 19:20:51	2EB5812CC946D9988C4635A78F56EAE882EF D84B6E48687887A70E82DCA90A01		
Test 4 LLS				08-APR-2020 09:27:55	95156BD01519F3DA035EFB829430D94E827A E3928950448FB7159C7538854F6E		
Test 5 MD5				08-APR-2020 20:13:08	15642A5D8328265E77672D88B2B637EC1F5D FE6AE75CEF1B9894AE5E834E3872		
Test 6 SHA1				09-APR-2020 07:49:31	586C0B27441632840572B3DB46DC84C1832D DEFE8B787D5AD115CFF6AE86B032		
Test 7 GMAC	HDLC, DIRECT_HDLC PORT					02-APR-2020 22:16:09	16D44543253AE4F9906A23DABF8672BDD66 E2CDC6792819537ABB859C19E2B17
Test 8 GMAC						03-APR-2020 13:12:17	A0BD9237DCE84A38774EDE4A5D1102ACE7 E80646A12990B542C14FE80A9C93D8
Test 9 GMAC						15-APR-2020 20:25:06	031F682EFA01CF9199DC86BEB5913FDEBB6 B3E5F31DCF3B6C46598190CB1F12F
Test 10 LLS						02-APR-2020 20:41:19	CC5A1428F2C7E4A58AF4AABF306C270071B FA60B78CA5C1B07C8CEEE214F296D
Test 11 MD5						03-APR-2020 15:09:06	1569CC5986D006FC2D0AED739A5218B3BC9 52BC6DEBE42F0F20E4AD15ED021FD
Test 12 SHA1						07-APR-2020 08:06:53	E8FB483221A524ABC87FB5D11CEB1A6B2A 378821E46AB8CE65AF8C31FDE031AE

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Test 13 GMAC	HDLC, DIRECT_HDLC RS485			07-APR-2020 13:11:17	54BE73A54AAE2BF47602B5BE3B29AFACB8 33738A8D86071A0EA141FC47C60B50
Test 14 GMAC				07-APR-2020 14:40:49	FBDA4AC16436DB52419E507B40AFFB57288 0FF6926CF7E577B814E19CA008459
Test 15 GMAC				07-APR-2020 16:26:51	CAA8ED53E699608C9A3ECA4D29A3A728FF D0C7503D288C8CFC8FBD73FC36D81C
Test 16 LLS				07-APR-2020 09:57:57	A608D284DEFF752FED6A59FAA57E04C80D BB18F525908EF2A0EB44524502C142
Test 17 MD5				07-APR-2020 18:03:04	D01CBCD61637B1CFC1097CA9481C01B3042 B15E53E411ECA8430C6AD1B38E1B4
Test 18 SHA1				08-APR-2020 07:49:52	E4A131C441DA673F15839C67F14CD3C006C2 4FA54B459592908B3D86BC9D8975
Test 19 GMAC	TCP GPRS	LONG_NAMES, LONG_NAMES _WITH_ CIPHERING	GENERAL_GLO_ CIPHERING SERVICE_SPECIFIC_ GLO_CIPHERING, SUITE_0	09-APR-2020 13:09:54	26E9F1A920A64F1784C7267B13E53987DDF0 CDAED3CDF0B39568F17A690E7E38
Test 20 GMAC				09-APR-2020 18:21:12	B14E51A7D07BDD9A4BBC8FDB2BFF1E95B 2B78E3457056A4AD3D4987527CA5CBF
Test 21 GMAC				09-APR-2020 20:33:31	05860754823AD1881FDD1E95EB9390F7CEC2 DD242E18188A5048F4552DDD2106
Test 22 LLS				09-APR-2020 10:59:20	95A2BAEEA6082BA62CD06395CB316B41408 6A62BACA119BDCB510CA9570E9686
Test 23 MD5				10-APR-2020 09:42:24	4AAB39AE7C85FE879544D133FFEE8E78F5D 4D7386654CCF75F426E862290E018
Test 24 PUSH				13-APR-2020 14:12:55	43BF262890EDB0E2A114FA55CF66237301F1 E37B201620A8AAE5A7472F72752E
Test 25 SHA1				13-APR-2020 08:24:18	703E6930E9F015A6B0F5E1056F58A3A5CB7D E6D23BEB551DC00FDE2770BB09E8

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 17th April 2020



Sergio Lazzarotto
Executive Director and President



Gyöző Kmethy
President Emeritus



Viktória Varjú
Certification Engineer

The DLMS UA is 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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism:high level security
  GMAC,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	71	0	18	0	53	0
COSEM	4790	0	15	1675	3100	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET
                                MULTIPLE_REFERENCES, SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:              GENERAL_GLO_CIPHERING
                                SERVICE_SPECIFIC_GLO_CIPHERING, SUITE_0

Data protection features:       (not collected)

Logical device(s) found:        SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"  
  FLAGid = "\LYE"  
  Type = "\LY-SM300 CT"  
  SerialNr = "12345678"  
  Comment = "\Application Context: LN, Authentication Mechanism:high level security  
GMAC,No Security"  
  Comment = "\Client ID:0x10,0x01,0x02"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	71	0	18	0	53	0
COSEM	4747	0	15	1688	3044	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET  
                                MULTIPLE_REFERENCES, SELECTIVE_ACCESS  
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET  
Security features:             GENERAL_GLO_CIPHERING  
                                SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0  
Data protection features:      (not collected)  
Logical device(s) found:      SAP = 1 is "4C594530303430373132333435363738"  
(LYE0040712345678)  
Active firmware(s):           Id=M00001 S=4215  
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01  
                                Id=190924 S=C078  
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, 48, 64, 70, 71, 72, 74  
COSEM classes found but not tested: (none)
```

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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 = "\JIANGSU LINYANG ENERGY CO.,LTD"  
  FLAGid = "\LYE"  
  Type = "\LY-SM300 CT"  
  SerialNr = "12345678"  
  Comment = "\Application Context: LN, Authentication Mechanism:high level security  
GMAC,No Security"  
  Comment = "\Client ID:0x10,0x01,0x02"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	71	0	18	0	53	0
COSEM	4704	0	15	1701	2988	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET  
                               MULTIPLE_REFERENCES, SELECTIVE_ACCESS  
                               SERVICE_SPECIFIC_BLOCK_TRANSFER, SET  
Security features:             GENERAL_GLO_CIPHERING  
                               SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0  
Data protection features:      (not collected)  
Logical device(s) found:      SAP = 1 is "4C594530303430373132333435363738"  
(LYE0040712345678)  
Active firmware(s):           Id=M00001 S=4215  
                               Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01  
                               Id=190924 S=C078  
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, 48, 64, 70, 71, 72, 74  
COSEM classes found but not tested: (none)
```

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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 = "\JIANGSU LINYANG ENERGY CO.,LTD"  
  FLAGid = "\LYE"  
  Type = "\LY-SM300 CT"  
  SerialNr = "12345678"  
  Comment = "\Application Context: LN, Authentication Mechanism:LLS,No Security"  
  Comment = "\Client ID:0x10,0x01,0x02"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	71	0	22	0	49	0
COSEM	4704	0	15	1701	2988	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
Communication profile:          HDLC  
  
Application context names:     LONG_NAMES  
  
Authentication mechanisms:     NO_SECURITY,LOW_LEVEL_SECURITY  
  
ACSE and xDLMS features:      GENERAL_BLOCK_TRANSFER,GET  
                               MULTIPLE_REFERENCES,SELECTIVE_ACCESS  
                               SERVICE_SPECIFIC_BLOCK_TRANSFER,SET  
  
Security features:             (not collected)  
  
Data protection features:      (not collected)  
  
Logical device(s) found:      SAP = 1 is "4C594530303430373132333435363738"  
(LYE0040712345678)  
  
Active firmware(s):           Id=M00001 S=4215  
                               Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01  
                               Id=190924 S=C078  
  
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  
                               44,45,48,64,70,71,72,74  
  
COSEM classes found but not tested: (none)
```

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Summary of features tested for Test 5

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism:high level security MD5,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}

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

TYPE      TOTAL      SKIPPED      INAPPLICABLE      INCONCLUSIVE      PASSED      FAILED
----      -
HDLC
APPL      71           0            18                0                 53          0
COSEM     4704         0            15                1701              2988        0
SYMSEC
PUBSEC
DP         0            0            0                 0                 0           0
GBT       25           0            10                5                 10          0

Communication profile:          HDLC

Application context names:     LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Authentication mechanisms:     NO_SECURITY, HIGH_LEVEL_SECURITY_MD5

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

Security features:             GENERAL_GLO_CIPHERING
                               SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0

Data protection features:      (not collected)

Logical device(s) found:
(LYE0040712345678)            SAP = 1 is "4C594530303430373132333435363738"

Active firmware(s):            Id=M00001 S=4215
                               Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                               Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

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

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Summary of features tested for Test 6

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"  
  FLAGid = "\LYE"  
  Type = "\LY-SM300 CT"  
  SerialNr = "12345678"  
  Comment = "\Application Context: LN, Authentication Mechanism:high level security  
SHA1,No Security"  
  Comment = "\Client ID:0x10,0x01,0x02"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All (MODE_E)				
APPL	71	0	18	0	53	0
COSEM	4704	0	15	1701	2988	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
Communication profile:          HDLC  
Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING  
Authentication mechanisms:      NO_SECURITY, HIGH_LEVEL_SECURITY_SHA1  
ACSE and xDLMS features:        ACTION, GENERAL_BLOCK_TRANSFER, GET  
MULTIPLE_REFERENCES, SELECTIVE_ACCESS  
SERVICE_SPECIFIC_BLOCK_TRANSFER, SET  
Security features:              GENERAL_GLO_CIPHERING  
SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0  
Data protection features:        (not collected)  
Logical device(s) found:        SAP = 1 is "4C594530303430373132333435363738"  
(LYE0040712345678)  
Active firmware(s):             Id=M00001 S=4215  
                                 Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01  
                                 Id=190924 S=C078  
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, 48, 64, 70, 71, 72, 74  
COSEM classes found but not tested: (none)
```


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Summary of features tested for Test 7

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism:high level security
  GMAC,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4790	0	15	1675	3100	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET
                                MULTIPLE_REFERENCES, SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:              GENERAL_GLO_CIPHERING
                                SERVICE_SPECIFIC_GLO_CIPHERING, SUITE_0

Data protection features:       (not collected)

Logical device(s) found:       SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):            Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C068

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, 48, 64, 70, 71, 72, 74

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

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Summary of features tested for Test 8

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism:high level security
  GMAC,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4747	0	15	1688	3044	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET
                               MULTIPLE_REFERENCES, SELECTIVE_ACCESS
                               SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:             GENERAL_GLO_CIPHERING
                               SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0

Data protection features:      (not collected)

Logical device(s) found:      SAP = 1 is "4C594530303430373132333435363738"
                               (LYE0040712345678)

Active firmware(s):           Id=M00001 S=4215
                               Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                               Id=190924 S=C058

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, 48, 64, 70, 71, 72, 74

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

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Summary of features tested for Test 9

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism:high level security
GMAC,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}

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

TYPE      TOTAL      SKIPPED      INAPPLICABLE      INCONCLUSIVE      PASSED      FAILED
----      -
HDLC      36           0            1                 0                 35          0
APPL      71           0            18                0                 53          0
COSEM     4747         0            15                1688              3044        0
SYMSEC                    All (No ciphered association with the required properties)
PUBSEC                    All (No ciphered association with the required properties)
DP         0           0            0                 0                 0           0
GBT        25          0            10                5                 10          0

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, GENERAL_BLOCK_TRANSFER, GET
                               MULTIPLE_REFERENCES, SELECTIVE_ACCESS
                               SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:             GENERAL_GLO_CIPHERING
                               SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0

Data protection features:      (not collected)

Logical device(s) found:      SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):            Id=M00001 S=4215
                               Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                               Id=190924 S=6104

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, 48, 64, 70, 71, 72, 74

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

Certification No. 2333

Summary of features tested for Test 10

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"  
  FLAGid = "\LYE"  
  Type = "\LY-SM300 CT"  
  SerialNr = "12345678"  
  Comment = "\Application Context: LN, Authentication Mechanism:LLS,No Security"  
  Comment = "\Client ID:0x10,0x01,0x02"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	22	0	49	0
COSEM	4790	0	15	1675	3100	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
Communication profile:          HDLC  
  
Application context names:     LONG_NAMES  
  
Authentication mechanisms:     NO_SECURITY,LOW_LEVEL_SECURITY  
  
ACSE and xDLMS features:      GENERAL_BLOCK_TRANSFER,GET  
                                MULTIPLE_REFERENCES,SELECTIVE_ACCESS  
                                SERVICE_SPECIFIC_BLOCK_TRANSFER,SET  
  
Security features:             (not collected)  
  
Data protection features:      (not collected)  
  
Logical device(s) found:      SAP = 1 is "4C594530303430373132333435363738"  
(LYE0040712345678)  
  
Active firmware(s):           Id=M00001 S=4215  
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01  
                                Id=190924 S=C068  
  
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  
                                44,45,48,64,70,71,72,74  
  
COSEM classes found but not tested: (none)
```

Certification No. 2333

Summary of features tested for Test 11

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism:high level security MD5,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4747	0	15	1688	3044	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
Communication profile:          HDLC

Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Authentication mechanisms:      NO_SECURITY, HIGH_LEVEL_SECURITY_MD5

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

Security features:              GENERAL_GLO_CIPHERING
                                SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0

Data protection features:       (not collected)

Logical device(s) found:       SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C058

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, 48, 64, 70, 71, 72, 74

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

Certification No. 2333

Summary of features tested for Test 12

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism:high level security
SHA1,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4747	0	15	1688	3044	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
Communication profile:          HDLC

Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Authentication mechanisms:      NO_SECURITY, HIGH_LEVEL_SECURITY_SHA1

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

Security features:              GENERAL_GLO_CIPHERING
                                SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0

Data protection features:       (not collected)

Logical device(s) found:       SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

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

Certification No. 2333

Summary of features tested for Test 13

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism: High level security
  GMAC,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4696	0	15	1703	2978	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET
                                MULTIPLE_REFERENCES, SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:              GENERAL_GLO_CIPHERING
                                SERVICE_SPECIFIC_GLO_CIPHERING, SUITE_0

Data protection features:       (not collected)

Logical device(s) found:       SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

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

Certification No. 2333

Summary of features tested for Test 14

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism: High level security
  GMAC,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4696	0	15	1703	2978	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET
                               MULTIPLE_REFERENCES, SELECTIVE_ACCESS
                               SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:             GENERAL_GLO_CIPHERING
                               SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0

Data protection features:      (not collected)

Logical device(s) found:      SAP = 1 is "4C594530303430373132333435363738"
                               (LYE0040712345678)

Active firmware(s):           Id=M00001 S=4215
                               Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                               Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

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


Certification No. 2333

Summary of features tested for Test 15

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"  
  FLAGid = "\LYE"  
  Type = "\LY-SM300 CT"  
  SerialNr = "12345678"  
  Comment = "\Application Context: LN, Authentication Mechanism: High level security  
GMAC,No Security"  
  Comment = "\Client ID:0x10,0x01,0x02"  
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4751	0	15	1687	3049	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET  
                                MULTIPLE_REFERENCES, SELECTIVE_ACCESS  
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET  
Security features:             GENERAL_GLO_CIPHERING  
                                SERVICE_SPECIFIC_DED_CIPHERING, SUITE_0  
Data protection features:      (not collected)  
Logical device(s) found:      SAP = 1 is "4C594530303430373132333435363738"  
(LYE0040712345678)  
Active firmware(s):           Id=M00001 S=4215  
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01  
                                Id=190924 S=C078  
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, 48, 64, 70, 71, 72, 74  
COSEM classes found but not tested: (none)
```

Certification No. 2333

Summary of features tested for Test 16

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, AuthenticationMechanismName:LLS,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}

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

TYPE      TOTAL      SKIPPED      INAPPLICABLE      INCONCLUSIVE      PASSED      FAILED
-----      -
HDLC      36             0             1                 0                 35          0
APPL      71             0             22                0                 49          0
COSEM     4696          0             15                1703              2978        0
SYMSEC                    All (No ciphered association with the required properties)
PUBSEC                    All (No ciphered association with the required properties)
DP         0             0             0                 0                 0           0
GBT        25            0             10                5                 10          0

Communication profile:          HDLC

Application context names:      LONG_NAMES

Authentication mechanisms:      NO_SECURITY,LOW_LEVEL_SECURITY

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

Security features:              (not collected)

Data protection features:       (not collected)

Logical device(s) found:        SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078

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
                                44,45,48,64,70,71,72,74

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

Certification No. 2333

Summary of features tested for Test 17

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism: High level security
MD5,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4696	0	15	1703	2978	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
Communication profile:          HDLC

Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Authentication mechanisms:      NO_SECURITY, HIGH_LEVEL_SECURITY_MD5

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

Security features:              GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING
                                SUITE_0

Data protection features:       (not collected)

Logical device(s) found:        SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C068

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, 48, 64, 70, 71, 72, 74

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

Certification No. 2333

Summary of features tested for Test 18

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, Authentication Mechanism: High level security
SHA1,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC	36	0	1	0	35	0
APPL	71	0	18	0	53	0
COSEM	4696	0	15	1703	2978	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

Communication profile: HDLC

Application context names: LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Authentication mechanisms: NO_SECURITY, HIGH_LEVEL_SECURITY_SHA1

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

Security features: GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING
SUITE_0

Data protection features: (not collected)

Logical device(s) found: SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s): Id=M00001 S=4215
Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

COSEM classes found but not tested: (none)

Certification No. 2333

Summary of features tested for Test 19

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "\12345678"
  Comment = "\Application Context: LN-Chiper,Authentication Mechanism: High level security
GMAC,No Security"
  Comment = "\Client ID:0x10,0x01"
}

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

TYPE      TOTAL      SKIPPED      INAPPLICABLE      INCONCLUSIVE      PASSED      FAILED
----      -
HDLC                      All(Communication profile not HDLC)
APPL      55           0            16                0                 39          0
COSEM     2360         0            8                 90                2262        0
SYMSEC    36           0            9                 0                 27          0
PUBSEC                      All (No ciphered association with the required properties)
DP         0            0            0                 0                 0           0
GBT       25           0            10                5                 10          0

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, GENERAL_BLOCK_TRANSFER, 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 "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

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

Certification No. 2333

Summary of features tested for Test 20

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "\12345678"
  Comment = "\Application Context: LN-Chiper,Authentication Mechanism: High level security
  GMAC,No Security"
  Comment = "\Client ID:0x10,0x01"
}

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

TYPE      TOTAL      SKIPPED      INAPPLICABLE      INCONCLUSIVE      PASSED      FAILED
----      -
HDLC                      All(Communication profile not HDLC)
APPL      55             0             16                0                 39          0
COSEM     2370          0             8                 87                2275        0
SYMSEC    33            0             12                0                 21          0
PUBSEC                      All (No ciphered association with the required properties)
DP         0             0             0                 0                 0           0
GBT       25            0             10                5                 10          0

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, GENERAL_BLOCK_TRANSFER, GET
                                  MULTIPLE_REFERENCES, RLRQ_RLRE
                                  SELECTIVE_ACCESS
                                  SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features:              GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING
                                  SUITE_0, SECURITY_ACTIVATE, KEY_TRANSFER

Data protection features:        (not collected)

Logical device(s) found:        SAP = 1 is "4C594530303430373132333435363738"
                                  (LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                  Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                  Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

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

Certification No. 2333

Summary of features tested for Test 21

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "\12345678"
  Comment = "\Application Context: LN-Chiper,Authentication Mechanism: High level security
  GMAC,No Security"
  Comment = "\Client ID:0x10,0x01"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All(Communication profile not HDLC)				
APPL	55	0	16	0	39	0
COSEM	2364	0	8	89	2267	0
SYMSEC	33	0	12	0	21	0
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
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, GENERAL_BLOCK_TRANSFER, GET
                                MULTIPLE_REFERENCES, RLRQ_RLRE
                                SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET
Security features:              GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING
                                SUITE_0, SECURITY_ACTIVATE, KEY_TRANSFER
Data protection features:       (not collected)
Logical device(s) found:       SAP = 1 is "4C594530303430373132333435363738"
                                (LYE0040712345678)
Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078
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, 48, 64, 70, 71, 72, 74
COSEM classes found but not tested: (none)
```

Certification No. 2333

Summary of features tested for Test 22

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "12345678"
  Comment = "\Application Context: LN, AuthenticationMechanismName:LLS,No Security"
  Comment = "\Client ID:0x10,0x01"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All(Communication profile not HDLC)				
APPL	57	0	18	0	39	0
COSEM	2407	0	8	76	2323	0
SYMSEC		All (No ciphered association with the required properties)				
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
Communication profile:          TCP

Application context names:      LONG_NAMES

Authentication mechanisms:      NO_SECURITY,LOW_LEVEL_SECURITY

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

Security features:              (not collected)

Data protection features:       (not collected)

Logical device(s) found:       SAP = 1 is "4C594530303430373132333435363738"
                                (LYE0040712345678)

Active firmware(s):            Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078

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
                                44,45,48,64,70,71,72,74

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


Certification No. 2333

Summary of features tested for Test 23

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "\12345678"
  Comment = "\Application Context: LN-Chiper,Authentication Mechanism: High level security
MD5,No Security"
  Comment = "\Client ID:0x10,0x01"
}
```

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

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All(Communication profile not HDLC)				
APPL	55	0	16	0	39	0
COSEM	2364	0	8	89	2267	0
SYMSEC	33	0	12	0	21	0
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

```
Communication profile:          TCP
Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING
Authentication mechanisms:      NO_SECURITY, HIGH_LEVEL_SECURITY_MD5
ACSE and xDLMS features:       ACTION, GENERAL_BLOCK_TRANSFER, GET
                                MULTIPLE_REFERENCES, RLRQ_RLRE
                                SELECTIVE_ACCESS
                                SERVICE_SPECIFIC_BLOCK_TRANSFER, SET
Security features:              GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING
                                SUITE_0, SECURITY_ACTIVATE, KEY_TRANSFER
Data protection features:       (not collected)
Logical device(s) found:        SAP = 1 is "4C594530303430373132333435363738"
                                (LYE0040712345678)
Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078
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, 48, 64, 70, 71, 72, 74
COSEM classes found but not tested: (none)
```

Certification No. 2333

Summary of features tested for Test 24

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "\12345678"
  Comment = "\Application Context: LN-Chiper,Authentication Mechanism: High level security
  GMAC,No Security"
  Comment = "\Client ID:0x10,0x01,0x02"
}
```

* Summary *

TYPE	TOTAL	SKIPPED	INAPPLICABLE	INCONCLUSIVE	PASSED	FAILED
----	-----	-----	-----	-----	-----	-----
HDLC		All(Communication profile not HDLC)				
APPL	55	0	16	0	39	0
COSEM	2417	0	2	75	2340	0
SYMSEC	33	0	12	0	21	0
PUBSEC		All (No ciphered association with the required properties)				
DP	0	0	0	0	0	0
GBT	25	0	10	5	10	0

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, DATA_NOTIFICATION
GENERAL_BLOCK_TRANSFER, GET
MULTIPLE_REFERENCES, RLRQ_RLRE
SELECTIVE_ACCESS
SERVICE_SPECIFIC_BLOCK_TRANSFER, SET

Security features: GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING
SUITE_0, SECURITY_ACTIVATE, KEY_TRANSFER

Data protection features: (not collected)

Logical device(s) found: SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s): Id=M00001 S=4215
Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
Id=190924 S=D078

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, 48, 64, 70, 71, 72, 74

COSEM classes found but not tested: (none)

Certification No. 2333

Summary of features tested for Test 25

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 = "\JIANGSU LINYANG ENERGY CO.,LTD"
  FLAGid = "\LYE"
  Type = "\LY-SM300 CT"
  SerialNr = "\12345678"
  Comment = "\Application Context: LN-Chiper,Authentication Mechanism: High level security
SHA1,No Security"
  Comment = "\Client ID:0x10,0x01"
}

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

TYPE      TOTAL      SKIPPED      INAPPLICABLE      INCONCLUSIVE      PASSED      FAILED
----      -
HDLC                      All(Communication profile not HDLC)
APPL      55           0            16                0                39          0
COSEM     2364        0            8                 89               2267        0
SYMSEC    33          0            12                0                21          0
PUBSEC                      All (No ciphered association with the required properties)
DP         0           0            0                 0                0           0
GBT       25          0            10                5                10          0

Communication profile:          TCP

Application context names:      LONG_NAMES, LONG_NAMES_WITH_CIPHERING

Authentication mechanisms:      NO_SECURITY, HIGH_LEVEL_SECURITY_SHA1

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

Security features:              GENERAL_DED_CIPHERING, GENERAL_GLO_CIPHERING
SUITE_0, SECURITY_ACTIVATE, KEY_TRANSFER

Data protection features:        (not collected)

Logical device(s) found:        SAP = 1 is "4C594530303430373132333435363738"
(LYE0040712345678)

Active firmware(s):             Id=M00001 S=4215
                                Id=SM31_AMI_IR_FMA06_R0.0.A_20191021 S=CD01
                                Id=190924 S=C078

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, 48, 64, 70, 71, 72, 74

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