

DLMS User Association

Bahnhofstrasse 28 CH-6302 Zug Switzerland Tel. +36 28 514 065

dlms@dlms.com

Certification No. 2110

This is to certify that the metering equipment identified as:

Type: DTSD545-WC100 Active firmware(s): Id=02 V=00020A1A

Mgmt. SAP = 1 is "484C5930303130333230313930343234" (HLY0010320190424)

Manufactured by: Holley Technology LTD

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

- CTT version: CTT 3.1 extended edition, 64bits, release 107
- Licensed to: 20180824_Holley_Technology_China (2018/8/24)
- COSEM object definitions file version: Object_defs_v3.3_released_180601.dat
- Media identifier(s): Abstract, Electricity

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| 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 | SERVICE_SPECIFIC _GLO_CIPHERING, SUITE_0 SECURITY_ ACTIVATE, KEY_TRANSFER | 15-MAY-2019 11:36:58 | 40EA8316CD458AF40D79F804481EE3514D 809E50168D7736412D146E3927D173 |
| Test 2 | HDLC, MODE_E | | | 15-MAY-2019 13:12:18 | ABCE1198A5423F03F7ADFA0AD04DF8AA FFCB53B0B4335E05AFFE494353AC5DD3 |
| Test 3 | ТСР | | | 15-MAY-2019 10:37:22 | 4A840CC6BB3BCCA4B7918E104C90F1E4E 848FBE58099B67A62C10FD5E0A5743B |

This DTSD545-WC100 meter type has already been certified as Certification No. 1928 and No. 2076 tested with HDLC.

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 May 2019

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President

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 = "\Holley Technology LTD"
  FLAGid = "\HLY"
 Type = "\DTSD545-WC100"
 ConfigurationId = "0000000000000001"
 SerialNr = "000020190424"
 Comment = "\FOR GBCS COSEM TEST"
  Comment = "\NO"
******
* Summary *
*****
TYPE TOTAL SKIPPED INAPPLICABLE INCONCLUSIVE PASSED FAILED
                                                                    0
HDLC 36
              0 1
                                          Ω
                                                         35
              0
                        21
0
                                                                    0
APPL 77
COSEM 375
       77
                                          0
                                                          56

      COSEM 375
      0
      0
      78
      297
      0

      SYMSEC 42
      0
      9
      0
      33
      0

      PUBSEC
      All (No ciphered association with the required properties)

               0
                                          78
                                                          297
PUBSEC
DP 0
                                         0
                                                0
                     0
              All (No association with the required properties)
GBT
Communication profile:
                                       HDLC
                                      LONG NAMES, LONG NAMES WITH CIPHERING
Application context names:
Authentication mechanisms:
                                       NO SECURITY, LOW LEVEL SECURITY
                                       HIGH LEVEL SECURITY GMAC
ACSE and xDLMS features:
                                       ACTION, GET, MULTIPLE REFERENCES
                                       SERVICE SPECIFIC BLOCK TRANSFER, SET
Security features:
                                       SERVICE SPECIFIC GLO CIPHERING, SUITE 0
                                       SECURITY ACTIVATE, KEY TRANSFER
Data protection features:
                                       (not collected)
Logical device(s) found:
                                       SAP = 1 is "484C5930303130333230313930343234"
(HLY0010320190424)
                                      Id=02 V=00020A1A
Active firmware(s):
                                       1,3,4,7(1),8,15(3),20,23,41,42,45,64(1),70
COSEM classes tested:
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 = "\Holley Technology LTD"
  FLAGid = "\HLY"
 Type = "\DTSD545-WC100"
 ConfigurationId = "0000000000000001"
 SerialNr = "000020190424"
 Comment = "\FOR GBCS COSEM TEST"
 Comment = "\NO"
******
* Summary *
*****
TYPE TOTAL SKIPPED INAPPLICABLE INCONCLUSIVE PASSED FAILED
HDLC
             All(MODE_E)
APPL 77 0 21 0 56 0

COSEM 375 0 0 78 297 0

SYMSEC 42 0 9 0 33 0

PUBSEC All (No ciphered association with the required properties)
PUBSEC
DP 0
                                      0
                    0
                                             0
             All (No association with the required properties)
GBT
Communication profile:
                                     HDLC
                                    LONG NAMES, LONG NAMES WITH CIPHERING
Application context names:
Authentication mechanisms:
                                     NO SECURITY, LOW LEVEL SECURITY
                                     HIGH LEVEL SECURITY GMAC
ACSE and xDLMS features:
                                     ACTION, GET, MULTIPLE REFERENCES
                                     SERVICE SPECIFIC BLOCK TRANSFER, SET
Security features:
                                     SERVICE SPECIFIC GLO CIPHERING, SUITE 0
                                     SECURITY ACTIVATE, KEY TRANSFER
Data protection features:
                                     (not collected)
Logical device(s) found:
                                     SAP = 1 is "484C5930303130333230313930343234"
(HLY0010320190424)
                                    Id=02 V=00020A1A
Active firmware(s):
                                    1,3,4,7(1),8,15(3),20,23,41,42,45,64(1),70
COSEM classes tested:
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 = "\Holley Technology LTD"
 FLAGid = "\HLY"
 Type = "\DTSD545-WC100"
 ConfigurationId = "0000000000000001"
 SerialNr = "000020190424"
 Comment = "\FOR GBCS COSEM TEST"
 Comment = "\NO"
******
* Summary *
*****
TYPE TOTAL SKIPPED INAPPLICABLE INCONCLUSIVE PASSED FAILED
HDLC
            All(Communication profile not HDLC)
APPL 77
COSEM 375
      77
            0 20 0
                                                   57
                                                           0
             0
                      0
                                     78
                                                   297
SYMSEC 45
            0 9
                                                  36
                                    0
                                                            Ω
            All (No ciphered association with the required properties)
PUBSEC
                                    0
                  0
                                              0
            All (No association with the required properties)
GBT
Communication profile:
                                  TCP
                                 LONG NAMES, LONG NAMES WITH CIPHERING
Application context names:
Authentication mechanisms:
                                  NO SECURITY, LOW LEVEL SECURITY
                                  HIGH LEVEL SECURITY GMAC
ACSE and xDLMS features:
                                  ACTION, GET, MULTIPLE REFERENCES, RLRQ RLRE
                                  SERVICE SPECIFIC BLOCK TRANSFER, SET
                                  SERVICE SPECIFIC_GLO_CIPHERING, SUITE_0
Security features:
                                  SECURITY ACTIVATE, KEY TRANSFER
Data protection features:
                                  (not collected)
Logical device(s) found:
                                  SAP = 1 is "484C5930303130333230313930343234"
(HLY0010320190424)
                                  Id=02 V=00020A1A
Active firmware(s):
                                  1,3,4,7(1),8,15(3),20,23,41,42,45,64(1),70
COSEM classes tested:
COSEM classes found but not tested: (none)
```