



How to Obtain IDIS Package 3 Certification

v2-08





1. Introduction

IDIS Package 3 Certification is now integrated into the DLMS UA Qualification Process. All **DLMS UA Members** have the ability to license the IDIS Package 3 specifications. There are no changes to the certification process for IDIS Package 2, however Package 2 certifications will cease by the end of 2024.

After this date, only re-certifications will be possible for IDIS Package 1 and IDIS Package 2.

1.1 Purpose

IDIS devices are tested for **Compliance** and **Compatibility** according to the process defined in the **DLMS UA Qualification Program**.

As a result, every certified IDIS device embedding IDIS Pack #3 Generic Companion Profile:

• Carries an IDIS Label which identifies the IDIS specification package 3:



- The Certificate clearly refers to:
 - The identification of the IDIS specification package.
 - The extensions to the minimal IDIS functionality implemented in this device (as described in the IDIS specification documents).
 - Identification of the Certificate of **Compliance** produced for this device.
 - The Applicant (the owner of the device IP) and the Recipient (the owner of the Certificate)
 - The type and model of the tested device.

1.2 Terms and Definitions

All the terms in bold used within this document are defined in the document **DLMS_UA_Definitions**

v2-08





2. Procedure to obtain the IDIS Certificate

The procedure to obtain IDIS Package 3 Certification includes the following phases:

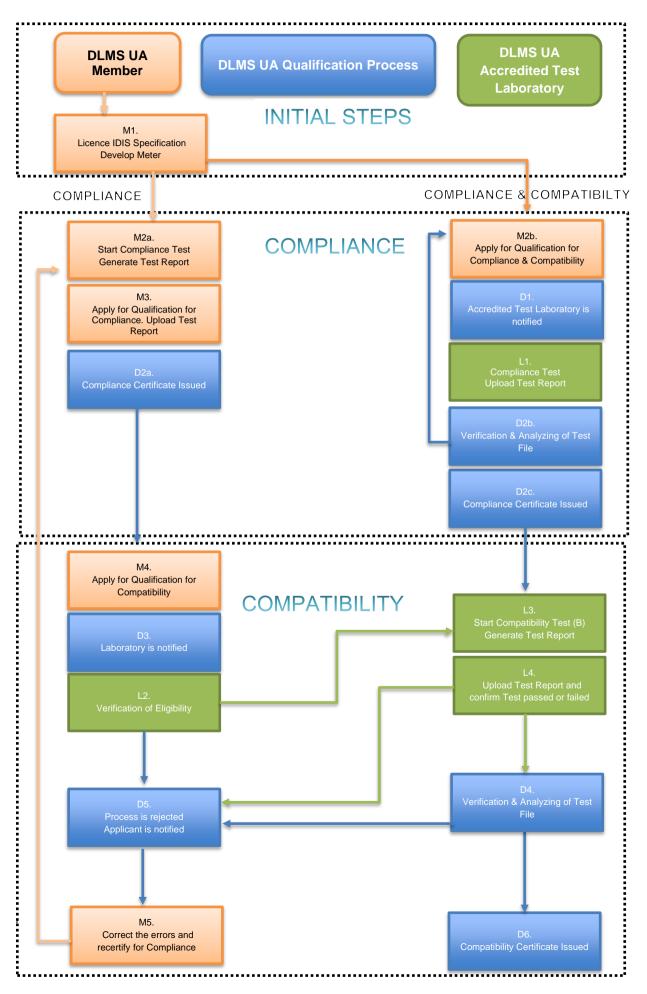
1. DLMS UA Qualification for Compliance:

- Provides certification against the core DLMS specifications (Blue Book and Green Book) and act as a badge of excellence for data exchange interoperability.
 This phase replace the Step 4. (DLMS Certification) in the procedure for Package 2 (see How to get the IDIS test label (package 2) on the IDIS Website).
- 2. DLMS UA Qualification for Compatibility:
 - Ensures certified devices are plug and play within a specific application irrelevant of the device manufacturer. Tests performed during this phase correspond to tests performed in the Step 8. (Conformance Test) and 12. (FIT Test) in the procedure for Package 2 How to get the IDIS test label (package 2).

In each phase, a set of steps needs to be completed (see figure on next page):











3. Description of the Process:

3.1 Initial Steps:

Step M1:

• License the required IDIS Package 3 specification:

The request to license the IDIS Specification should be made from the IDIS pages on the **DLMS UA** website or through <u>info@idis-association.com</u> email address. This will involve agreeing to the license conditions and making payment to download the documents. Develop an IDIS meter according to the relevant IDIS Package 3 specifications.

You then have the ability to:

apply for the Qualification for Compliance and then apply for the Qualification for Compatibility

or

apply for the Qualification for **Compliance & Compatibility** simultaneously.

These two possibilities are described in details in the next paragraph.





3.2 Qualification:

3.2.1 Compliance then Compatibility:

This is the case when a member carries out a self-test for **Compliance** and wishes to obtain a Certificate of **Compliance**. The product must contain all the features described the specifications of the IDIS Package 3.

1. Compliance :

Step M2a:

✓ Start Compliance test, generate test report.

Step M3:

- ✓ Go to <u>Qualification Program | dlms</u> and apply for a **DLMS UA Qualification** for **Compliance** for the product. This involves being a **DLMS UA** Member in good standing, having the right tools, and completing the **DLMS UA** Certification.
- ✓ Upload the self-test results via the online DLMS UA Qualification Portal to obtain a DLMS UA Qualification Certificate for Compliance. It is essential that the tool is configured correctly to test all mandatory services defined in the IDIS Package 3 specifications and that the product is tested in its native communication technology. If native communication technology is not available in the tool, IP communication technology is accepted. The report obtained must contain the mandatory services stated in the IDIS Package 3 specification.
- ✓ **DLMS UA** confirm the Application and verify the eligibility.
- DLMS UA confirm the eligibility and issue an invoice to the member covering:

- Fee for **DLMS UA** assessment of product **Qualification** application eligibility and issuance of **DLMS UA Qualification Certificate** for **Compliance**.

- Fee for the **DLMS UA** assessment and verification of the **Qualification** test results.

Step D2a:





- Once settlement done, DLMS UA confirm the payment and start analyse of the test result.
- If DLMS UA approve the test result then the Certificate is issued and DLMS
 UA Member is notified.
- If approval of the test result failed, then the Applicant is notified and invited to upload new test files.
- DLMS UA issue an invoice to the Applicant including fees for the DLMS UA assessment and verification of the Qualification test results.
- Once settlement done, DLMS UA confirm the payment and start analyse of the new test result.
- If DLMS UA approve the test result then the Certificate is issued and DLMS
 UA Member is notified else the Applicant has the possibility to upload again new test files.

2. Compatibility:

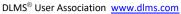
Prepare for the IDIS Package 3 Certification

- ✓ Applicants must have obtained the IDIS Package 3 specification and ensure their implementation meets the required specification.
- DLMS UA strongly advises Members to ensure that the product has been tested using a pre-Certification Test Run at a DLMS UA Accredited Test Laboratory using the iCTT3 DLMS UA Test Tool OR has been tested using iDTT3 to ensure that there are no Firmware changes required after obtaining the Certificate of Compliance. If the Firmware ID changes in the time between obtaining a Certificate of Compliance and a Certificate of Compatibility for IDIS Package 3, the product will fail.

Step M4:

- ✓ Go to <u>Qualification Program | dlms</u> and apply for a DLMS UA Qualification for Compatibility against the IDIS package 3 within the application form. The Certificate of Compliance obtained in Step D2a is used to assure that the application for Certification for Compatibility will apply on a product having the same serial number and firmware. DLMS UA is notified.
- ✓ **DLMS UA** confirm the Application and verify the eligibility.
- DLMS UA confirm the eligibility and issue an invoice to the member covering:







 Fee for DLMS UA assessment of product Qualification application eligibility and issuance of DLMS UA Product Qualification Certificate for Compatibility.

- Fee for the **DLMS UA** assessment and verification of the **Qualification** test results.

✓ The **DLMS UA Accredited Test Laboratory** is also notified.

Note: It is essential that the prerequisite Certificate of **Compliance** contains the mandatory services stated in the **IDIS Package 3** specification. If this has not been done, then the applicant should use the process below "**Compliance & Compatibility**" where both processes are carried out by a **DLMS UA Accredited Test Laboratory**.

Step D3:

- ✓ DLMS UA notifies the DLMS UA Accredited Test Laboratory and the DLMS UA Member on receipt of the payment of the application fees.
- ✓ The DLMS UA Accredited Test Laboratory arrange the delivery of the product with the DLMS UA Member.

Step L2:

- The DLMS UA Accredited Test Laboratory verifies the eligibility of the product received.
- iCTT3.1 DLMS UA Test Tool is a Compatibility Test Tool and it does not test the functionalities listed in annex A considering that those have been tested during the Qualification for Compliance. However it has been asked to DLMS UA Accredited Test Laboratory to verify that those functionalities have been tested for Compliance and therefore appear on the corresponding certificate. In the case they have not been tested prior running test for Compatibility the member will be asked to resubmit his meter to Qualification re-certification for Compliance with all features used by IDIS package 3.
- If the eligibility is confirmed, the laboratory will conduct the required tests for Compatibility (go to Step L3 of of clause 3.2.2) else the DLMS UA Accredited Test Laboratory reject the process (then go to Step D5 of clause 3.2.2)





3.2.2 Compliance & Compatibility:

This is the case when the Member wishes to subcontract both the Certification for **Compliance** and the Certification for **Compatibility** to a **DLMS UA Accredited Test Laboratory**.

1. Compliance:

Step M2b:

- Go to <u>Qualification Program | dlms</u> and apply for a **DLMS UA** Qualification for Compliance & Compatibility for the product. This involves being a **DLMS UA** Member in good standing. **DLMS UA** is notified.
- ✓ **DLMS UA** confirm the Application and verify the eligibility.
- ✓ If Eligibility criteria have been fulfilled, DLMS UA will issue an invoice to the DLMS UA Member:
 - Fee for Application eligibility and issuance of a **DLMS UA** Product **Qualification** Certificate of **Compliance** and Certificate of **Compatibility**.
 - Fee for the **DLMS UA** assessment and verification of the Qualification test results.

Step D1: Contact with the DLMS UA Accredited Test Laboratory

- DLMS UA notifies the DLMS UA Member and the DLMS UA Accredited Test Laboratory on receipt of the payment of the application fees stated in the Step M2b.
- ✓ The **DLMS UA Test Laboratory** will contact you to arrange the testing schedule.

Step L1: Start compliance test and generate test report

- DLMS UA Compliance Certification Test Run fees are invoiced directly by the DLMS UA Accredited Test Laboratory to the Applicant. These fees are outlined in the DLMS UA Internal Regulations (Bylaws).
- Once settlement done, the DLMS UA Accredited Test Laboratory conducts the Certification Test Run.
- ✓ The DLMS UA Accredited Test Laboratory generates the report





- The DLMS UA Accredited Test Laboratory uploads the Test File online to the DLMSUA Qualification Portal. The DLMS UA Member is notified.
- Applicant acknowledge and accept the report upload by the DLMS UA
 Accredited Test Laboratory. DLMS UA is notified.

Step D2b:

 DLMS UA do the second level of eligibility. If OK then start the analyzing of the test file.

Step D2c:

- If all details are correct, and the Test File confirms that the test has indeed been passed, the certificate of Compliance is issued. The DLMS UA Member and the DLMS UA Accredited Test Laboratory are notified.
- ✓ If the approval of the Test File failed, DLMS UA notifies the DLMS UA
 Accredited Test Laboratory.





2. Compatibility:

Step L3:

- ✓ The DLMS UA Accredited Test Laboratory will issue and send an invoice for the Certification for Compatibility testing to the DLMS UA member.
- On receipt of payment, the DLMS UA Accredited Test Laboratory will reach out to arrange the testing schedule.
 - The DLMS UA Accredited Test Laboratory carries out the test for Compatibility.
 - The DLMS UA Accredited Test Laboratory conducts pre-Certification Test
 Runs and Certification Test Runs using the DLMS UA Accredited Test Tool.
 - The following fees, defined in the DLMS UA Internal Regulations (Bylaws), apply to the test runs and these fees are invoiced directly by the DLMS UA Accredited Test Laboratory:
 - Fees for **DLMS UA** compatibility pre-**Certification Test Run**
 - Fees for **DLMS UA** compatibility **Certification Test Run**
 - Member will be notified by the DLMS UA Accredited Test Laboratory of the status of the testing.
 - ✓ The **DLMS UA Accredited Test Laboratory** generates the report.

Step L4:

The DLMS UA Accredited Test Laboratory have to confirm payment receipt from Applicant for the DLMS UA compatibility Certification Test Run and uploads the report via the online DLMS UA Qualification Portal and confirm test passed or failed.

Step D4:

DLMS UA do the second level of eligibility. If OK then start the analyzing of the test file else reject the Application.

Step D5 Rejected:

The DLMS UA Accredited Test Laboratory has confirm that the test are failed,
 DLMS UA reject the process and the DLMS UA Member is notified.

Step D6:

✓ When the appropriate fees have been paid and the test results have been verified by **DLMS UA**, the certificate is issued, and the device is listed on the certified





$\mathsf{DLMS}^{\circledast} \text{ User Association } \underline{\mathsf{www.dlms.com}}$

product list on the public pages of the **DLMS UA** website if authorized by the Applicant.

✓ If the approval of the Test File failed, DLMS UA notifies the DLMS UA
 Accredited Test Laboratory.

Step M5:

✓ The **DLMS UA Member** correct the errors and certify for Compliance.





ANNEX A

Mandatory Features tested in Compliance

Authentication mechanisms :

HIGH_LEVEL_SECURITY_ECDSA HIGH_LEVEL_SECURITY_SHA_256

Security features :

GENERAL_CIPHERING_WITH_IDENTIFIED_KEY GENERAL_CIPHERING_WITH_WRAPPED_KEY GENERAL_CIPHERING_WITH_AGREED_ONE_PASS_DH GENERAL_CIPHERING_WITH_AGREED_STATIC_UNIFIED GENERAL_DED_CIPHERING GENERAL_SIGNING SERVICE_SPECIFIC_GLO_CIPHERING KEY_TRANSFER KEY_AGREEMENT CERTIFICATES