

Test Application / Test Contract

For Certification of PROFIBUS – DP/DP-V1/DP-V2
Master/Slave Products According to IEC 61158

Application for Testing a PROFIBUS - DP Master/Slave Product

Please fill out completely and return with authorized signature (digital or PDF scan) to:

pic.industry@siemens.com

Attn: **PROFIBUS Test Lab**

We

Company	
Department	
Address Line 1	
Address Line 2	
Name of Applicant	
Email Address	
Telephone	

are applying for certification of the product described in more detail on the next page. Basis is the test specification for PROFIBUS DP products of the PROFIBUS User Organization (PNO).

Earliest possible Test Date	
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Test Features required (Please check all that apply)

Master Basic Slave (DPV0)
DP-V1 Alarms

Technical Data of the Product:

Product Name	
Release HW Version	
Release FW Version	
Release SW Version	
Name of the GSD File	
Release GSD Version	

Enclosed is the following: **(must be supplied by the applicant)**

- A general description of the product.
- Descriptions and explanations needed to understand how the product functions, e.g., a product manual, as well as a complete description of the PROFIBUS functions supported.
- Manufacturer's declaration that the product meets the safety-related and EMC specifications applicable to its use(UL 1950, UL 508, EN 50081, EN 50082, etc.) listing all specifications/standards which are declared to be met.
- GSD file according to Revision 3.0 or higher for DP and DP-V1 slaves and masters.
- GSD file according to Revision 4.0 or higher for DP-V2 slaves and masters.
- A copy of the form confirming the Ident Number assigned by the PTO.
- The exact type designation, and release versions of the hardware, firmware and software.
- A copy of the schematic for the RS-485 hardware drivers.
- Any special connectors in case the device does not utilize the standard 9-pin connectors.
- In addition to the device itself, any auxiliary equipment required to test the operational functionality of the device, e.g., motor for drive testing, etc.
- A purchase order to the Profibus Interface Center for the testing fee(s).

For the more complex devices, it is *strongly* suggested that the applicant plan to have a representative at the lab for at least the 1st day of testing in order to help resolve any problems which may arise. It is further suggested that this representative have the capability of making any software/firmware changes necessary to clear up any early test problems.

For testing of a Master device, the customer must send a person for commissioning purposes for at least the first day of testing.

The guidelines described in Attachments 1, 2 and 3 apply to the execution of this order for testing. The applicant agrees to their content.

Signature of Applicant

Place

and Date

Fee Schedule

The fees for carrying out the tests are based on the services used.

The basic fee for a PROFIBUS DP slave is (Includes 3 days of testing)	\$4500
For simple devices (LSPM2 or SPM2) we offer a reduced fee (Includes 2 days of testing)	\$3000
The basic fee for a master is (Includes 8 days of testing)	\$12000
The basic fee for each DP-V1 Extension (per connection tested) Excluding Alarms	\$1500
The basic fee for Alarms testing	\$1500
The basic fee for combination master/slave devices	\$3000 + Master test fee

In the event that lab personnel must spend time determining how a product functions in order to conduct testing or in the event of failures which require a re-test cycle, additional charges will be incurred by the applicant. Each additional day will cost \$1500.

The service consists of testing and the test report.

PURCHASE ORDER REQUIREMENTS

Address PO to:
Siemens Industry, Inc
1000 Deerfield Parkway
Buffalo Grove, IL 60089-4513

Email for remittance:
ar.industry@siemens.com

TERMS: net 30

Email PO to: pic.industry@siemens.com

Attachment 1 for Test Application

Processing of Test Requests

The PNO-PROFINET Test Lab carries out the tests impartially, in the chronological sequence in which the orders were received. During the entire process, from arrival to return shipment, it is ensured that unauthorized persons will have no access to the test item.

The clients, as well as persons from the PNO advisory board designated by the board of the PNO, have the right to be present during the test as witnesses. The person responsible for the test will ensure that the principle of confidentiality vis-à-vis other clients as well as safety measures are not jeopardized by this.

Processing of the Test Request

For the test, the applicant makes available to the PNO-PROFINET Test Lab the device to be tested, including technical documentation. For the test to be considered a prototype test, the specimen has to correspond to the devices of the series.

On arrival, the test objects are immediately taken to the rooms of the PNO-PROFINET Test Lab. As a rule, this is done with the specimen still packaged. The PNO-PROFINET Test Lab checks and documents the complete shipment.

During arrival inspection, the scope and the testability of the test item are determined and documented. The test request is returned with a corresponding explanation if it is determined that the client's requirements exceed the testing capability of the PNO-PROFINET Test Lab regarding testing scope and measuring accuracy, or that the test item does not meet the technical prerequisites for a test according to the testing methods and testing procedures used as a basis. In addition, all those applications are returned which endanger objective results or which are of small significance.

Storing the Test Object

If testing of the item cannot be started immediately after its receipt, it will be properly stored and placed under lock and key.

Test

The test is carried out exclusively according to PNO guidelines for operating PNO-PROFINET test labs and according to internal instructions of the PNO-PROFINET Test Lab. The test is carried out by appropriately trained personnel expressly assigned by the director of the PNO-PROFINET Test Lab.

The test is based on testing methods, including testing instructions and testing specifications, of the PNO-PROFINET Test Lab recognized by the PNO. The testing procedures, and the results gained through it, are monitored by the director of the PNO-PROFINET Test Lab or his representative. The client will be informed within a reasonable time about discrepancies which occur during testing. Steps to correct them can only be initiated by the client.

After the entire test has been concluded, the PNO-PROFINET Test Lab will summarize the results of the test in a test report.

The test report lists all test items which were passed, not passed and which are undecided. The test report states explicitly that the test as executed means a single run of the test items indicated, with a single specimen of the customer implementation. From this, neither a general claim of proven standard conformity of the tested implementation can be derived, nor is a statement included regarding stability or quality. On request, the test protocols made by the test system during testing are made available to the customer in their entirety.

Appeal

Within two weeks, the customer can, in writing, **appeal** the test results mentioned in the test report. If, within an additional 4 weeks, no agreement can be reached between the customer and the PROFINET Test Lab, the customer has the right to turn to the advisory board of the PROFIBUS User Organization (PNO) for arbitration, to whom the PNO itself assigns the task of a mediation- and arbitration center, according to its overall requirements for testing and certification (FA1/PNO-PRZ/05 Dec 1992).

Therefore, the PNO advisory board is to be approached first for a mediation discussion. If this effort is not successful, the test customer can call for an expert accepted by both parties.

Shipping/Storing

In accordance with the PNO guideline "PROFINET IO Device Test", the test plant is continually expanded -within the scope of what is technically possible- with a wide spectrum of PROFINET-products by different manufacturers, in order to ensure interoperability of as many PROFINET-products as possible. An agreement must be made between the manufacturer and the PROFINET Test Lab if the customer wishes the device to be returned. It is assumed unless otherwise noted that the product under test will remain at the LAB facility.

Shipping by the PNO-PROFINET Test Lab

If the tested product is to be returned to the customer, the following procedure is followed. Within a reasonable time after the test has been completed, the PNO-PROFINET Test Lab will provide for suitable packaging and proper shipment of the devices, data media and documents. How the items are shipped is to be agreed on with the client beforehand. In every case it is guaranteed that the item is protected from damage and unauthorized interference during storage, transport and shipping. The customer and the PNO-PROFINET Test Lab will receive copies of the shipping papers. Costs for packaging and shipping are borne by the customer.

The Customer Transports Devices, Data Media and Documents Themselves

The customer (or their representative) is provided suitable opportunity and assistance to pack, load and transport the items mentioned above. The transfer is confirmed by the customer or their representative. The customer bears the cost for packaging.

Confidential Treatment of Customer-Specific Information and Products

The employees of the PNO-PROFINET Test Lab are obligated to treat all customer-specific information and products confidentially.

Corresponding to the capacity of the PNO-PROFINET Test Lab, simultaneous processing of test requests is provided for. To ensure confidentiality vis-à-vis different customers, an agreement is made that only one customer (or his representative) respectively shall be present in the PNO-PROFINET Test Lab, and that confidentiality vis-à-vis the other customers is maintained. An agreement can be made that several customers (or their representatives) are present at the same time but this requires the consent of all customers.

Special Arrangement if Orders for Testing are Interrupted

The customer's devices, data media and documents remain in the PNO-PROFINET Test Lab if there is an interruption of the test assignment and the customer doesn't take them back.

If, due to customer delays, the testing is delayed from the agreed-upon start date, the PNO-PROFINET Test Lab reserves the right to void the original test date and reassign a new test date to the customer. If a device has begun testing but the test must be delayed more than three business days (e.g. to update firmware to address issues), the PNO-PROFINET Test Lab may place the test on hold and assign a new test date to the customer.

Documentation of the Test Results

The documentation of the test results which are summarized in the test report ensures that the test can be repeated any time under the same conditions. All documentation is marked unmistakably with at least the following entries:

- name of document
- unmistakable test number
- date

All test results are treated confidentially and are suitably filed. The safekeeping period is 3 years. The documents are saved electronically on a controlled access server. After this time has expired, the documents are destroyed and the data media deleted.

Corrections or additions after the test report has been issued are marked as additions to the test report. The additions are marked with a consecutive number, and are assigned clearly to this test report by its number. Regarding format, the additions correspond to the specifications for test reports. The test reports do not contain advice or suggestions which ensue from the test results.

Attachment 2 for Test Application

Terms of Delivery and Payment

The delivery and payment terms of SIEMENS INDUSTRY, INC. apply.

The contractor only guarantees the following:

- that the tests are carried out correctly by adhering to the latest version of the PNO guidelines when the order was placed, and to the test guidelines agreed on with the client;
- that the data in the documents prepared about these tests corresponds to the test result
- that the evaluations of the product tested are made as conscientiously as is done with the contractor's own products

Warranty

The warranty period is 12 months starting with the return of the tested product by the contractor to the client or after submitting the test report to the client if the tested product remains with the contractor for expanding the test system.

Warranty claims are to be filed including a fault description that is as exact as possible. If the claim is valid, the contractor, under exclusion of further claims, is obligated to remedy the fault at his expense, with a new test if required, and to correct data in the test documents which doesn't apply. If it turns out that the fault reported did not exist, the client has to bear the cost for the new test.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS AND CONSTITUTES THE ONLY WARRANTY OF SIEMENS INDUSTRY, INC. WITH RESPECT TO THE SERVICES PROVIDED.

The foregoing states Clients exclusive remedy against Siemens Industry, Inc. for any defect in the Services or for failure of the Services to be as warranted, whether Client's remedy is based on contract, warranty, failure of such remedy to achieve its essential purpose, tort (including negligence), strict liability, indemnity or any other legal theory, and whether arising out of warranties, representations, instructions, installations or defects from any cause.

Liability

LIMITATION OF LIABILITY- NEITHER SIEMENS INDUSTRY INC. ,NOR ITS SUPPLIERS SHALL BE LIABLE, WHETHER IN CONTRACT, WARRANTY, FAILURE OF A REMEDY TO ACHIEVE ITS ESSENTIAL PURPOSE, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, INDEMNITY OR ANY OTHER LEGAL THEORY, FOR LOSS OF USE, REVENUE OR PROFIT, OR FOR COST OF CAPITAL OR OF SUBSTITUTE USE OR PERFORMANCE, OR FOR INDIRECT, SPECIAL, LIQUIDATED, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR ANY OTHER LOSS OR COST OF A SIMILAR TYPE, OR FOR CLAIMS BY CLIENT FOR SUCH DAMAGES RESULTING TO ANY THIRD PARTY.

Place of Settlement

Governing Law and Assignment- The laws of the State of Tennessee shall govern the validity, interpretation and enforcement of this Agreement. Assignment of this agreement may be made only upon the written consent of both parties, except that Siemens Industry, Inc. may assign this Agreement to a subsidiary of Siemens Industry, Inc. or the parent or a subsidiary of the parent of Siemens Industry, Inc. without the consent of the Client. Any attempted assignment or transfer of any of the rights, duties or obligations of this Agreement by either party, other than as specifically allowed by Siemens Industry, Inc. herein, shall be void. If consent is given, this Agreement shall be binding upon and inure to the benefit of the assigns.