

Registration form for PROFINET-conformity examination

Please return this form to the examining laboratory as completely as possible. The following pages serve for completeness control of the needed documents at the same time. After processing this non-binding test request, you will receive an offer from us which you can order. Test dates can only be allocated after an order has been placed.

Please follow the current indications for the conformity examination in the guideline „How-to-get-PN-certificate (PI Order No.: 2.922)“ from Profibus & Profinet International (PI) on the web page www.Profibus.com.

The examination bases on that one of currently valid IEC61158 and IEC 61784 and is executed by Phoenix Testlab. The examination is carried out after PI Testspezification for PROFINET IO Devices (Testspezification for PROFINET IO Devices (PI Order No.: 2.372)).

Definitions and general rules are fixed in Document "Framework for Testing and Certification of Products with PI Technologies (PI Order No.: 2.912)".

Note:

In preparation for the certification test to current specification you can find all important documents and test tools in the current PN test bundle, which members can download for free from the PI website. The document "Readme_Vx.xx" refer to the running times of the individual test systems. It is recommended as a pre-test to perform the tests with the PN-Tester once.

The guideline "How-to-get-PN-certificate (PI Order No.: 2.922)" describes the procedures necessary for the attainment of a certificate for a PROFINET device. Furthermore it gives hints for the successful preparations for the certification test as well as describing procedures for brand labelling and dealing with equipment variants.

1 Documents for PROFINET- conformity examination

Delivery obligation

For the latest Informations please have a look at the latest version of PI Document „How-to-get-PN-certificate_2922n.pdf“

- 1.1 Filled out Registration form for PROFINET-conformity examination (Document on hand).**
- 1.2 All documentations and equipment descriptions which are required for the understanding of the operation of the examinee.**
(Manual, technical description for putting into operation, technical Documents for Device Installation, Customer specific parameter and Diagnostic data, etc.)
- 1.3 PROFINET GSDML-File in final version (including the referenced graphic file)**
- 1.4 Description of the diagnostic-alarms within the GSD-file if supported by the device**
- 1.5 Description how to change the input data if supported**
- 1.6 For the execution of the PROFINET-conformity examination additional facilities and equipment, which are necessary for the examinee and the usual measure going beyond, are needed of the equipment manufacturer,**
 - this one making the practical business of the examinee possible.
 - this one making possible triggering the demanded events with the examinee.
(e.g. Triggering of alarms, a load for actuators, an engine for frequency converters, manufacturer specific parameter setting software, special cables. etc.)

Please also follow the notes to this in chapter 5.

2 Examining customer identification

2.1 Examining customer/company/organisation

Applicant :

Address :

:

:

Phone :

E-Mail :

**Wish date of
the examination** :

2.2 Contact person for the order handling

Name :

Phone :

E-Mail :

2.3 Contact person for the examinations

Name :

Phone :

E-Mail :

3 Scope of PROFINET IO examination

Client wishes to purchase following Tests and Services:

3.1 PROFINET IO-Device Tests

PROFINET device tests are mandatory for every product using PROFINET.

- ☐ in accordance with Conformance Class A (RT)
- ☐ in accordance with Conformance Class B (RT)
- ☐ in accordance with Conformance Class C (IRT)
 - *Precondition is the test according to Conformance Class A or B*
 - *For Conformance Class C testing, it is mandatory that the customer supplies the DUT with a **physical synchronization signal (wire)** that is accessible from outside the product enclosure.*

Netload Robustness for Security – Netload Class 1 – 3

- *This test is already included in the IO-Device Tests and mandatory.*

Given Netload Class: ☐ Netload Class "I" or
☐ Netload Class "II" or
☐ Netload Class "III"

3.2 Additional optional PROFINET feature Test

☐ System Redundancy S2

3.3 Additional Profile Tests

- ☐ PROFIenergy
- ☐ PROFIsafe V2 (is performed externally as sub-order)
Number of F-modules to be tested:
- ☐ In addition, we would like to receive the PROFIsafe test software chargeable
Only possible in conjunction with a PROFIsafe test.

3.4 Further Tests

☐ Pre-test / Development accompanying Test

3.5 Approval Services

- ☐ PNO Approval management
Number of Certificates:
- ☐ Applicant is Member of PNO

3.6 Number of IO-Devices to be certified

- ☐ Single device
- ☐ Device family

Number of Devices with identical Firmware:

Number of Devices with different PN stack / Firmware:.....

It is required a ***manufacturer's declaration about the firmware equality***, as well as a list of types of devices to be certified.

3.7 Number of Ports

- ☐ One- or two-Port Device
- ☐ Multiport Device

4 Identification of the examinee

4.1 Technical data of the examinee

Model Name : (Model Name)

Order Number :

Serial Number :

Revision Number : (Revision)

Hardware-Version : (HW Revision)

Software-Version : (SW/FW Revision)

PN-Stack-Version : (DevKit Revision)

Used
ASIC/Processor :

Name of the
GSDML-File :

DAP ID/
ModuleIdentNumber: (DAP to be tested)

Vendor-ID :

Device-ID :

Power consumption : (optional)

Physical interface

☐ Metallic connector RJ45	<i>Number of ports:</i>
☐ Metallic connector M12	<i>Number of ports:</i>
☐ Metallic connector M8	<i>Number of ports:</i>
☐ Metallic connector	<i>Number of ports:</i>
☐ Fiber optic connector SC-RJ	<i>Number of ports:</i>
☐ Fiber optic connector LC	<i>Number of ports:</i>
☐ Fiber optic connector SC	<i>Number of ports:</i>
☐ Fiber optic connector	<i>Number of ports:</i>



4.2 Customer

Company :

Contact person :

Address :

:

:

Phone :

5 Prerequisites for a fast examination

To make an as fast as possible and unproblematic putting into operation of the device possible in our laboratory, additional information or descriptions are needed to the examinee of you under circumstances. This information doesn't have always to be taken from the manual or the GSDML file.

To minimize additional clarification effort, we ask you to take the following points into account and to provide ourselves with the needed additional information and materials.

In- and Output Data

It is required to be able to change the process data of the device while the tests. For this reason it is required that a minimum capacity of the device is made available. For example physical digital in- and output modules should be available at a bus coupler. If this is not possible due to the special construction of the device a description should be provided of you which describes how the Input and Output Values can change. If a handing over oder virtual Memory is used internally the Inputs are reflected to the Outputs.

Alarm activation

During the test it is required to arouse alarms manually. A description should therefore be availably which alarm can how triggered.

Tension supply

If the voltage supply isn't realized about a standard-screwing or snap-in termination, the required plugs or already pre-confectioned cables have to be enclosed.

Bus connector

If a plug is used for the connection of the device to the bus (Ethernet) which is no standard M12 D or RJ45, the required plugs or already pre-confectioned cable (adapter) have to be enclosed.

Input- and Output Data

If the Input and output signals aren't wired with standard solderless lugs, the required plugs or already pre-confectioned cables have to be enclosed. The bridging of some output signals to Input signals can already be wired by you.

What can be certified?

The certification is only possible for off-the-shelf devices ready to go into production. Modification of the Hardware, Software or the GSDML-File afterward is not allowed. The test examination of technologie components like single-controller is possible although, however be no certificates assigned by PNO.

How do I get my certificate?

In principle, certificates mustn't be issued by examining laboratory. These carry out the specified examinations and then hand over the manufacturer a test report. With this a certificate can be applied for at the PNO. The prefabricated application is available in the download area of the PNO home page.

Cooperation of the customer

If the putting into operation of the device is possible with considerable effort and only with special knowledge, a putting into operation support or the support of our testengineer is required.

Version stands

Please make sure that the FW and HW revision as well as the GSDML file version are put on exactly in the test report. The certificate refers exclusively to these tested version stands.

Whereabouts of the examinee

In accordance with the general Terms and Conditions of Phoenix Testlab no examinees are kept or laid down durably after completion of an examination. The storage duty of the original examinee for a later possible examination repetition lies with the customer. In accordance with the guidelines of the PNO the test system has to be steadily improved with equipment of different manufacturers. After a separate arrangement certain examinees can therefore be integrated into the examining construction durably. In this case the storage duty of the examinee lies with Phoenix Testlab. In this case the customer agrees to pass the examinee on to the examining laboratory free of charge.

Miscellaneous

The general Terms and Conditions of Phoenix Testlab which you find on our web page (<https://nmi-testlab.de/>) are exclusively valid.

Signature of the customer

Place, date

6 Examination costs

The prices for the offered services always refer to one test run for one interface, with the test cases required for the respective device. A detailed test report is contained in the examining costs.

If necessary required increase charges like:

- Increased time expenditure at the putting into operation
- special function tests
- test repetitions or
- fault diagnosis

are calculated with the currently valid hour rates as additional expenses.