



Registration of a PROFIBUS Device

Please read the enclosed [description](#)

Please register the PROFIBUS device described below. We hereby confirm, that we use the ident number (ID number) only for a device which complies with the PROFIBUS guidelines.

Device Description: ① (please enter the **complete** description)

Model name _____ Release _____
Manufacturer _____ Master _____ Slave _____
Protocol type: ② _____ FMS _____ DP _____ DP Extensions (DPV1) _____

The following, already existing ID number shall be used for the device. A corresponding manufacturer declaration is enclosed. **Only possible for brandlabels, DPV1 updates or GSD updates!** ③

The device supports PA profile version ④

Only for PA profile version 3.0! ⑤

The device uses the following profile specific ID number(s) ⑥
(Please enter **at least one** of the mentioned possibilities)

Analysers _____ Multi_Variable _____
The device supports the following Physical Layer(s) ⑦ _____ RS485 _____ IEC 61158-2 _____

A manufacturer specific ID number is also used besides the profile specific ID number. ⑧

Desired manufacturer code for the GSD file name: ⑨ (Only for manufacturer specific ID numbers!)

If possible, please use the following manufacturer code for the GSD file name for this device (max. 4 alpha numerical characters):

Contact person ⑩ (PI will send the confirmation to this address)

Our contact person for questions about the device above is:

Name: _____ Department _____
Street: _____
Country: _____ ZIP code: _____ City: _____
Phone: _____ Fax: _____ E-mail: _____

Invoicing: (Please tick)

We are member of the PROFIBUS organisation in _____ (country)
and we will pay the fee of 80 EURO after receipt of invoice.

We are not a member of a PROFIBUS organisation. We will pay the fee of 310 EURO after receipt of invoice.

Our VAT (Value Added Tax) registration No. is:

Place, Date

Legally binding signature of applicant



How to register a PROFIBUS device:

As specified in the PROFIBUS guidelines, an ident number (ID number) is required for all PROFIBUS devices using PROFIBUS-DP communication (except of Master Class 2 devices). An ID number is also required for PROFIBUS-FMS devices if the FMS device can be configured with a GSD file. The ID number allows devices connected to the bus to be identified with a minimum amount of protocol overhead. In addition, the ident number is used to archive files which contain information on device features and configuration (so-called GSD files). An ID number is only assigned for devices which conform with the PROFIBUS guidelines.

Manufacturers must register each device type at PROFIBUS Nutzerorganisation e.V. (PNO) and get either a manufacturer and/or profile specific ID number. The ident number is not a serial number. The value range is 0001 Hex to FFFE Hex. As soon as an ID number for a device type has been assigned to a manufacturer by PNO, this number can be used for each manufactured device of this type without renewed registration. If the device is modified technically, it remains associated with the device type provided that it is still possible to describe the parameters, modules and options (e.g. modular I/O devices) in a single GSD file. The use of an already existing ID number is only possible if one of the exceptions listed at ③ applies. Additionally a corresponding manufacturer declaration is needed.

① Device description:

Please enter the exact name of the device as included in the GSD file. Only the device named here will be registered for the corresponding ID number. And please don't forget to enter the release of the device.

② **Protocol type:** Please enter the communication profile which is supported by the device. In case of combi devices (FMS/DP devices) multiple fields can be selected. Support of the extended DP functions has to be indicated.

③ **Use of an existing ID-number:** Basically a new registration of a device is required (including new ID number!), if the functions of a device have been changed. The use of already existing ID numbers is only possible if one of the following exceptions applies:

- *Brand label or joint developments*

A manufacturer declaration of the already registered manufacturer is required, which confirms the functional identity of the device and allowance to use the registered ID number. Additionally the name of the GSD file must contain a different manufacturer code (see ⑦). The GSD files should only differ in the key words „Vendor_Name“ und „Model_Name“.

- *DP Extensions*

Because of compatibility reasons, updating of devices with extended DP functions (DPV1) can require the use of the same ID number. For that a manufacturer declaration is required, which confirms that the old device won't be delivered any more. Additionally, the manufacturer code of the GSD file name has to be changed (and registered) as well as the key words „Revision“, „Model_Name“ and „GSD_Revision“.

- *GSD Update*

If a GSD file of an already registered device is updated due to an additional module, but without any further functional changes, the same ID number can be kept. In this case an additional manufacturer code for the new GSD file can be registered, too.

In any case a signed manufacturer declaration containing all required details must be annexed to the application.

④ **PA profile version:** If the device is a PA device, please enter the supported PA profile version (2.0 or 3.0). **Important:** starting with profile version 3.0, profile specific ID numbers/GSD files are used for PA devices, providing manufacturer independent interchangeability of devices. If a PA device supports profile version 3.0, one profile specific ID number **must be** registered at least. Additionally manufacturer specific ID numbers/GSD files can be used (see ⑥).

⑤ **Only for PA profile version 3.0:** The fields 6 to 8 only must be filled in if the device supports PA profile version 3.0.

⑥ **Profile specific ID-numbers:** Please enter one option at least. Simultaneous use of fix and universal profile specific ID numbers/GSD files is possible. In the Profile for Process Control Devices, Version 3.0 (3.042) the following profile specific ID numbers/GSD files are specified:



Fix device classes	• Transmitter	0x9700 to 0x970F
	• Actuator	0x9710 to 0x971F
	• Discrete_Input	0x9720 to 0x972F
	• Discrete_Output	0x9730 to 0x973F
	• Transmitter AI + TOT	0x9740
	• Transmitter 2 AI + TOT	0x9741
	• Transmitter 3 AI + TOT	0x9742
Universal device classes	• Analyser	0x9750
	• Multi_Variable	0x9760, for complex, variable devices

⑦ If your device supports PA profile version 3.0, please select the physical layer which is used (RS 485 or IEC 61158-2). This is necessary because, depending on the physical layer, different GSD files are used.

The corresponding GSD files are available in the GSD library at www.profibus.com.

⑧ Please tick, if you want to use a manufacturer specific ID number/GSD file besides the profile specific ID number/GSD file. In this case, an additional ID number will be applied to you.

⑨ **Desired manufacturer code for the GSD file name:**

According to the PROFIBUS guidelines all manufacturers of PROFIBUS devices are required to provide a GSD file for each device type. Structure and syntax of GSD files are described in the PROFIBUS guidelines "GSD Specification for PROFIBUS-DP" (Order No. 2.122) and "GSD specification for PROFIBUS-FMS" (Order No. 2.102). If you would like a particular manufacturer code for your GSD file, you can specify the required code for your company here. Otherwise or if the desired code is already registered for another manufacturer, PNO will assign a manufacturer code automatically. The confirmation of the registration you will receive from PI includes the GSD file name which has been applied to you. The structure of the GSD file name is as follows:

- The first four characters contain the manufacturer code (alpha numeric, min. 1 and max. 4 characters)
- The following four characters consist of the ID number (hexadecimal)
- The last character of the file name extension (**GSD**) is the language version. The default language version code is D (**D**efault). Additionally you can use the following version codes: English = E, French = F, German = G, Italian = I, Portuguese = P, Spanish = S.

Attention: the parameters in the GSD file have to be independent with regard to the language!

⑩ **Contact person**

Please name the contact person for further information on the device and GSD file.

PROFIBUS GSD Editor and GSD Library:

GSD files have a standard file format, which is described in the PROFIBUS guidelines. PROFIBUS Nutzerorganisation e.V. has developed a GSD Editor (only for PROFIBUS-DP, GSD Revision 2 without extensions at the moment!), to assist the manufacturer when setting up GSD files for PROFIBUS-DP slave devices. The editor includes a complete checking of syntax and semantics according to the GSD specifications. You can download the GSD Editor free of charge from the PROFIBUS Web site at www.profibus.com.

Members of PROFIBUS International additionally can additionally publish their GSD files free of charge in the GSD Library at www.profibus.com, if the GSD files conform the PROFIBUS specifications. Therefore, please send your GSD file(s) and affiliated DIB file(s) (optional) to us with additional information about manufacturer, device name, slave_family and release of the GSD file.

Liability exclusion:

PROFIBUS Nutzerorganisation e.V. (PNO) treats the information on your application form with utmost care. Please check the information returned to you upon receipt. PNO refuses any liable for mistakes when assigning the ID number provided that the mistake has not arisen through gross negligence.