

TP303DTM - Device Type Manager

The screenshot shows the configuration interface for the TP303 Series Profibus PA Position Transmitter. The interface is titled "TP303 Series Profibus PA Position Transmitter" and features the "smar" logo. On the left, there is a tree view under "OnLine Parameterize" with the following structure:

- OnLine Parameterize
 - Blocks
 - Transducer
 - Lower/Upper
 - Temperature
 - Analog Input
 - Totalizer
 - Preset
 - Display
 - Identification
 - OffLine Parameterize
 - Observe
 - Diagnosis

In the center, there is a 3D model of the transmitter. On the right, there is a list of parameters with input fields:

- Ordering Code:
- Main - Board SN:
- Software Revision:
- Hardware Revision:
- Tag:
- Device Man:
- Device ID:
- Dev. Serial #:
- Module Serial #:

At the bottom right of the parameter list is a "Write" button. Below the parameter list are navigation icons (Home, Back, Forward) and a "Write" button. At the bottom left, there is a status bar showing "Connected" and "Reading Xmtr Data..."





Specifications and information are subject to change without notice.
Up-to-date address information is available on our website.

web: www.smar.com/contactus.asp

INTRODUCTION

TP303DTM is from the family of Smar's PROFIBUS DTMs. With TP303DTM is possible to have access to many functionalities of TP303 transmitters:

- ✓ Transmitter Identification and Manufacturing Data.
- ✓ Position Trim.
- ✓ Temperature Trim.
- ✓ Device Configuration.
- ✓ Device Maintenance.

For further details about topics above, refer to the TP303 manual.

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TP303DTM

Pre - Requirements

The user needs to be familiar with the use of frame application FDT (Field Device Tool).

Installation

To do the TP303DTM Installation and all Smar’s DTMs, run the file **setup.exe** from CD **Smar Device Library**. After ending the CD-ROM installation, get into DTMs catalog from frame application to update DTMs list.

The download of installation package of Smar’s DTMs can be done at <http://www.smar.com/support.asp>. The user has to do a login at site.

TP303DTM could be integrated in all frame applications that comply with the version 1.2 of the FDT/DTM standard.

Topology

After TP303DTM is installed and included at DTMs frame application catalog, a DTMs topology must be mounted (representing the devices physical topology).

On top must be inserted the communication DTM (responsible for communication between computer and the first element from physical topology), the TP303DTM is the last element of topology (represents the TP303).

In many cases, is necessary a DTM gateway type (responsible for communication protocol conversion). The TP303DTM could be used with Communication DTM and Gateway DTM from other manufacturers, if they comply with FDT 1.2 standard.

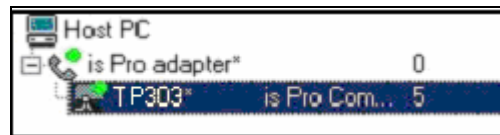


Figure 1 – “Add Device” Screen

Before changing TP303DTM to online, verify in the topology, if the address set in TP303DTM is the same of the TP303 device address. If it is not, change to the correct address through the communication DTM.

While the TP303DTM is offline (not connected), only the option **Offline Parameterize** will be enabled. After connected, will be possible to have online access to many functionalities of TP303:

- Online Parameterize
- Observe
- Diagnosis

Layout

The DTMs from Smar follow a standard layout. The parameters are distributed in many screens according to its functionality. The screens can be accessed by clicking the DTM options. Every time you click an option, all screen parameters relative to the selected option will be read from the instrument.

Each DTM screen with parameters that can be written has a **Write** button. When any parameter is modified, the related field will change its color. After writing, the DTM realizes the reading of the changed parameters and updates the screen.

In the figure below, the TP303DTM Online Parameterization navigation tree can be seen. The other options also appear.

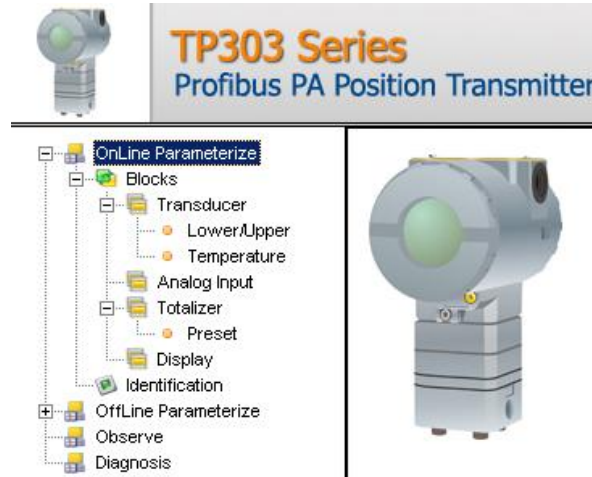

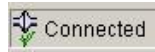


Figure 2 – TP303DTM navigation tree

In the window's bottom part the user has access to navigation buttons . They allow go to home page, back to previous page or go to next page, respectively.

The communication status can be verified - connected or disconnected:



TP303DTM Functions

Below we have a brief description about each TP303DTM function.

1. **Online Parameterize** – This function is used to do the TP303 online parameterization, is enabled when the TP303DTM is online. The user level access for this function is "Operator" (read only) and "Maintenance" (complete access).

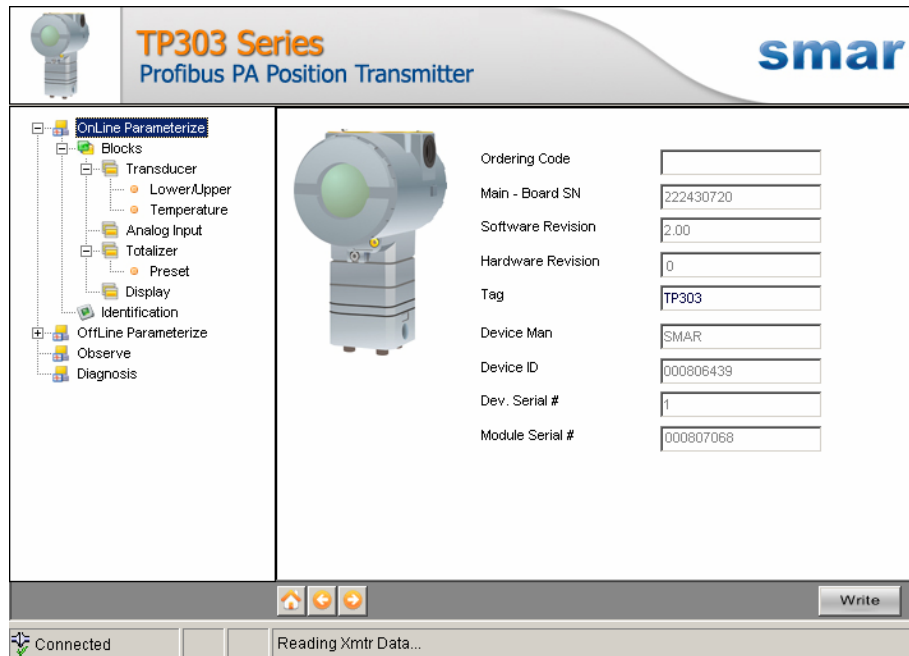


Figure 3 – TP303DTM “Online Parameterize” Screen

2. **Offline Parameterize** - This function is used to make the TP303 offline parameterization, the parameter values configured in this function can be written in TP303 through the **Download** function. The user level access for this function is “Maintenance”.

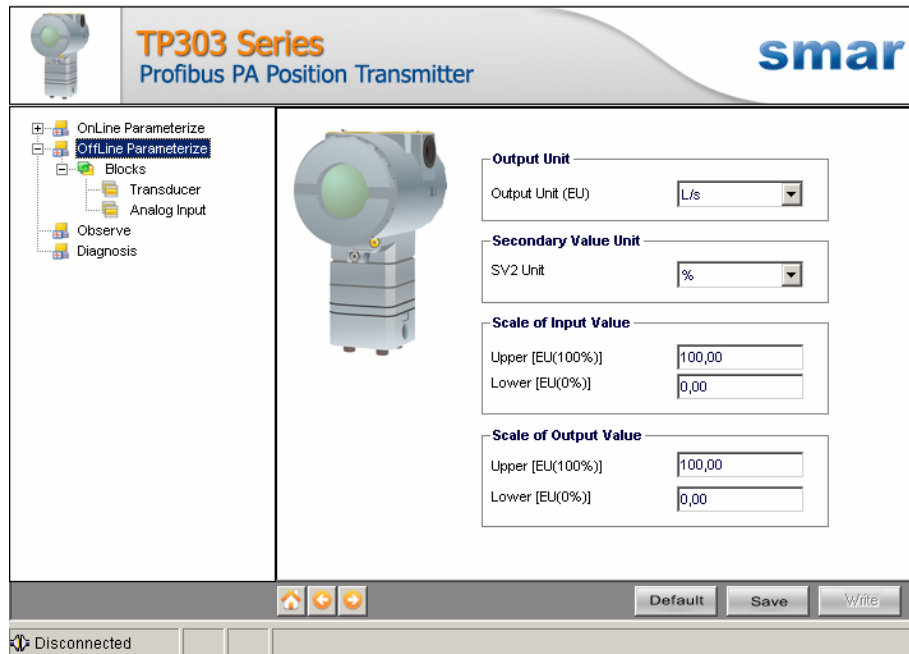


Figure 4 – TP303DTM “Offline Parameterize” Screen

3. **Observe** – Through this function is possible monitoring the TP303 process variables. This function is enabled when the TP303DTM is online. The user level access for this function is “Operator”.

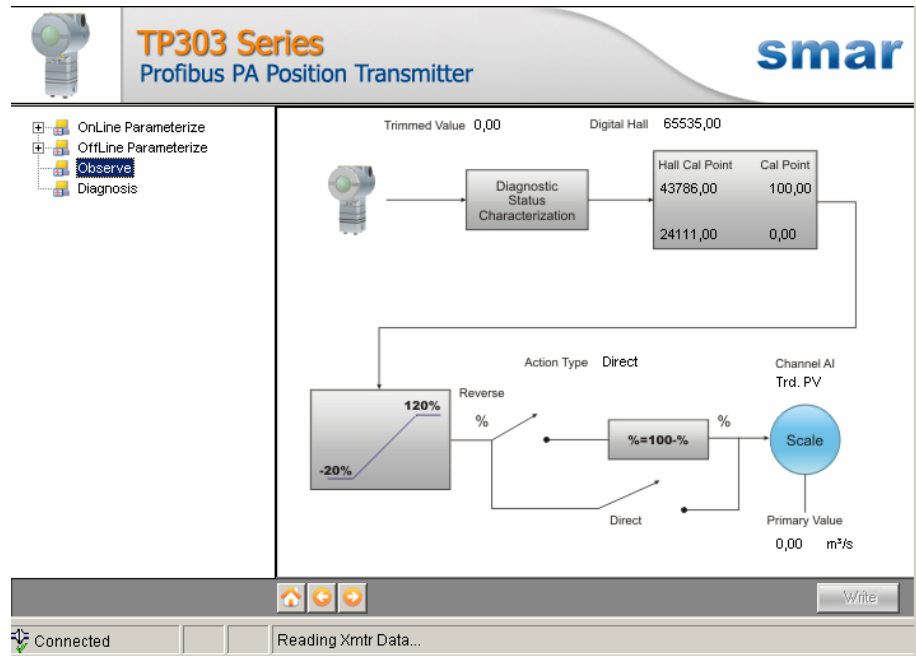


Figure 5 – TP303DTM “Observe” Screen

4. **Diagnosis** – Through this function the user has access to the TP303 diagnostic parameters. This function is enabled when the TP303DTM is online. The user level access for this function is “Operator”.

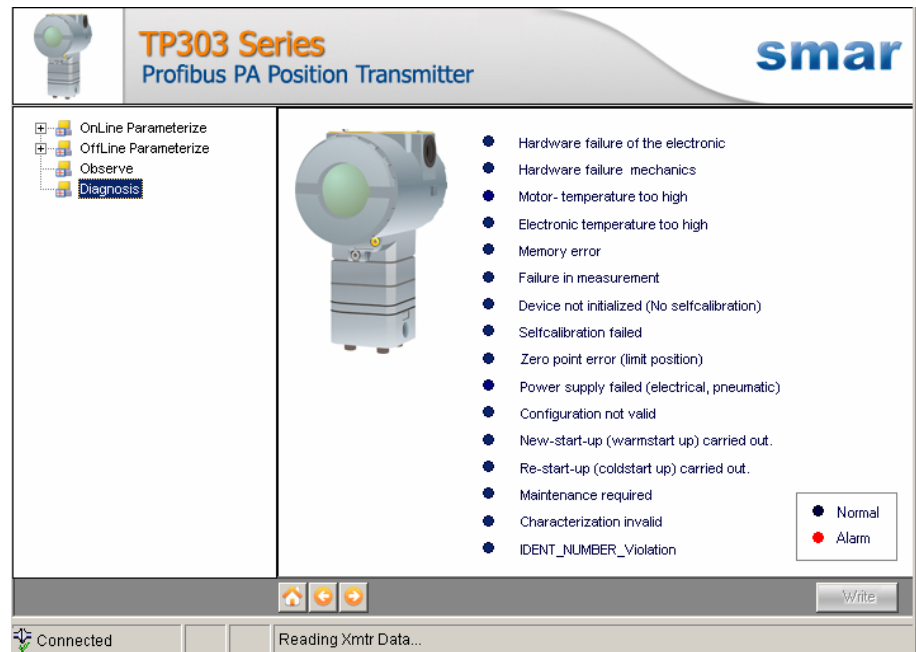


Figure 6 – TP303DTM “Diagnosis” Screen

5. **Upload** - This function reads the TP303 parameters and updates the TP303DTM database with the recent values. This function is enabled when the TP303DTM is online. The user level access for this function is “Maintenance”.
6. **Download** - This function writes the parameters configured in the TP303 **Offline Parameterize** function. This function is enabled when the TP303DTM is online. The user level access for this function is “Maintenance”.