

smar - DT303DTM

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DT303DTM

DT303DTM - Device Type Manager

The screenshot shows the 'DT303 Series Profibus PA to Density Transmitter' software interface. The title bar includes the smar logo. The interface is divided into several sections:

- OnLine Parameterize:** A tree view on the left showing a hierarchy of blocks: Blocks, Transducer (with sub-items: Transducer Sim., Cal. Pressure, Cal. Density, Cal. Self Pressure, Cal. Self Density, Temperature), Analog Input 1, Analog Input 2, Analog Input 3, Display, Identification, OffLine Parameterize, Observe, and Diagnosis.
- Device Image:** A 3D rendering of the DT303 transmitter device.
- Parameter Fields:** A list of fields for configuration:
 - Ordering Code:
 - Main - Board SN:
 - Software Revision:
 - Hardware Revision:
 - Tag:
 - Device Man:
 - Device ID:
 - Dev. Serial Number:
 - Ident. Num. Selector:
- Buttons:** A 'Write' button is located at the bottom right of the parameter fields.
- Status Bar:** At the bottom, it shows 'Connected' and 'Reading Xmtr Data...'.



DT303DTMME



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

DT303DTM is from the family of Smar's DTMs PROFIBUS.

With DT303DTM is possible to have access to many functionalities of DT303 transmitters:

- ✓ Transmitter Identification and Manufacturing Data.
- ✓ Pressure Trim.
- ✓ Temperature Trim.
- ✓ Concentration Calibration.
- ✓ Polynomial.
- ✓ Equipment Configuration.
- ✓ Equipment Maintenance.

For further details about topics above, refer to the DT303 manual.

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DT303DTM

Pre - Requirements

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

Installation

To do the DT303DTM installation and all Smar’s DTMs, run **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.

DT303DTM could be integrated in all frame applications according to the version 1.2 of the FDT/DTM standard.

Topology

After DT303DTM 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 the computer and the first element from physical topology), the DT303DTM is the last element of topology (represents the DT303).

In many cases, is necessary a DTM gateway type (responsible for communication protocol conversion). The DT303DTM could be used with Communication DTM and Gateway DTM from other manufacturers, if they comply with the FDT 1.2 standard.



Figure 1 – “Add Device” Screen

Before changing DT303DTM to online, verify in the topology, if the address set in DT303DTM is the same of the DT303 device address. If it is not, change to the correct address through the DTM communication.

While the DT303DTM 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 DT303:

- 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 the screen parameters relative to the selected option will be read from the device.

Each DTM screen with parameters that can be written has a **Write** button. When any parameter is modified, the relative 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 DT303DTM Online Parameterization navigation tree can be seen. The other options also appear.

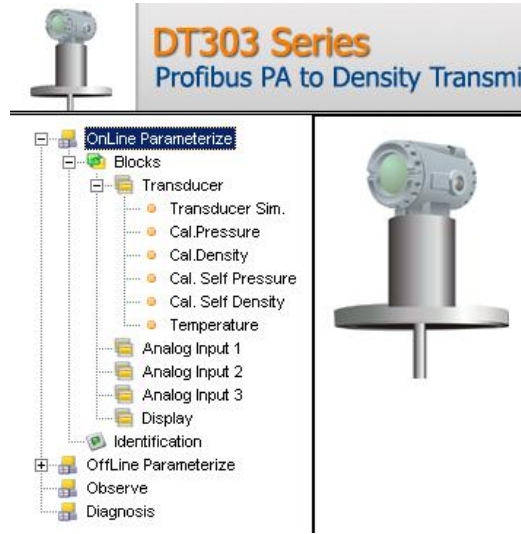



Figure 2 – DT303DTM navigation tree

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:



DT303DTM Functions

Below we have a brief description about each DT303DTM function.

1. **Online Parameterize** – This function is used to make the DT303 online parameterization, is enabled when the DT303DTM is online. The user level access for this function is “Operator” (read only) and “Maintenance” (complete access).

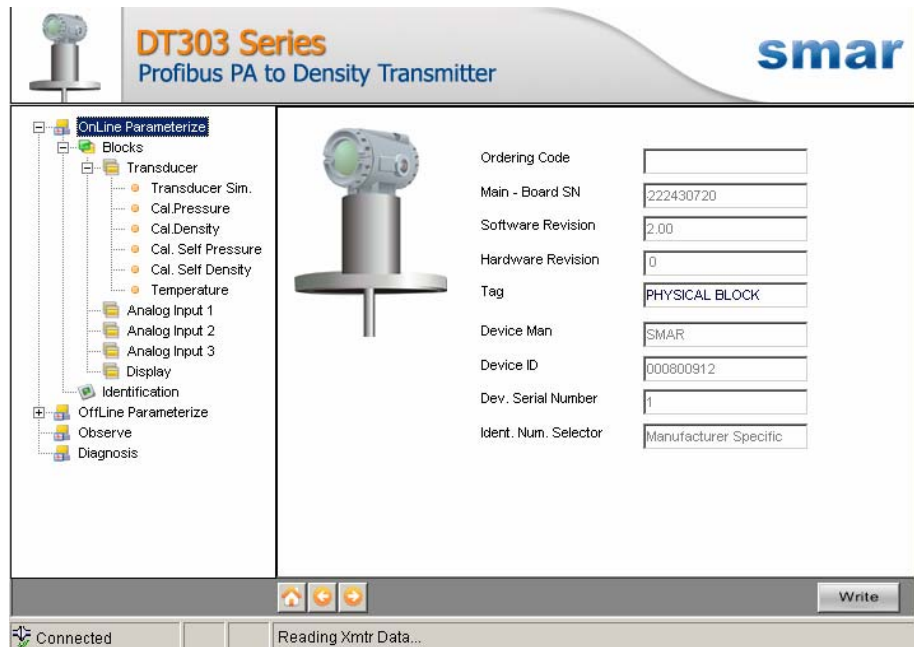


Figure 3 – DT303DTM “Online Parameterize” Screen

2. **Offline Parameterize** - This function is used to make the DT303 offline parameterization, the parameter values configured in this function can be written in DT303 through the **Download** function. The user level access for this function is “Maintenance”.

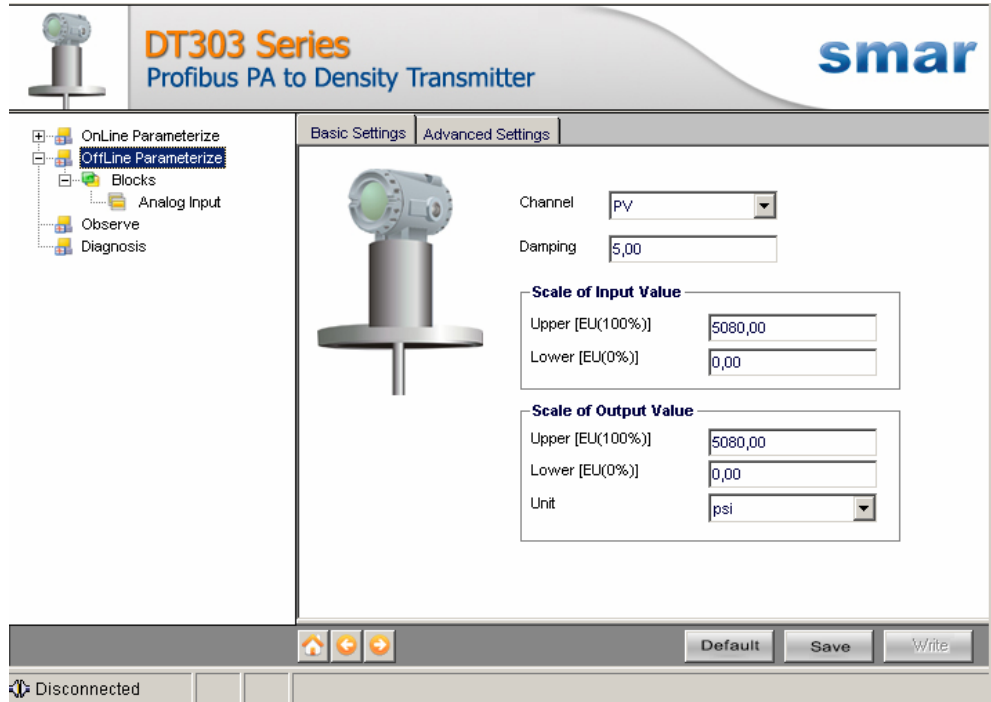


Figure 4 – DT303DTM “Offline Parameterize” Screen

3. **Observe** – Through this function is possible to monitor the main process variables. This function is enabled when the DT303DTM is online. The user level access for this function is “Operator”.

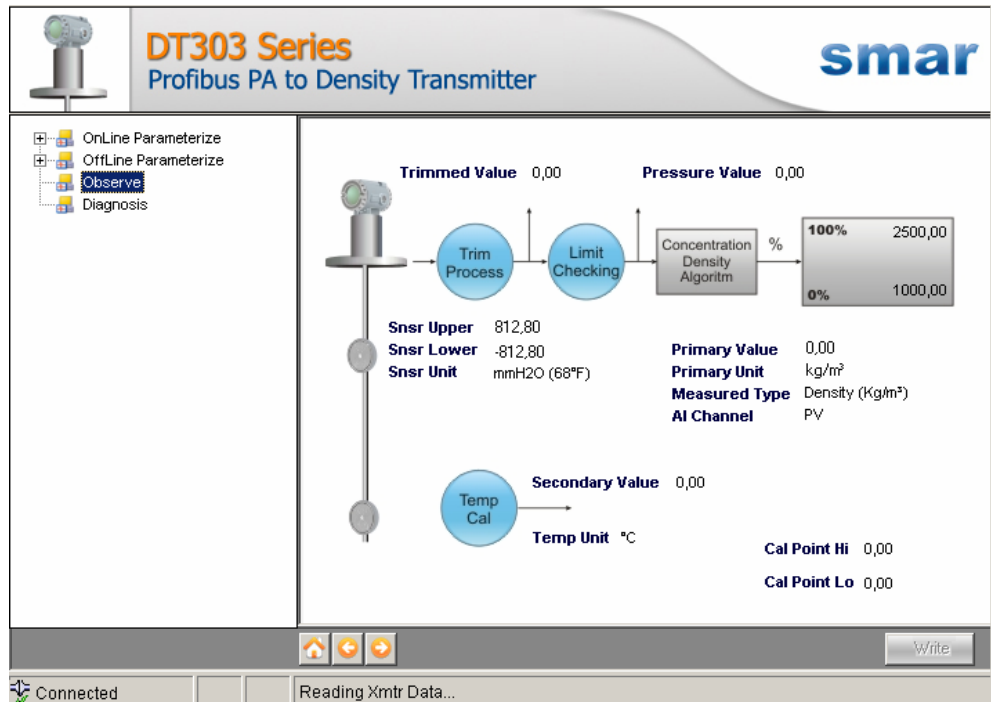


Figure 5 – DT303DTM “Observe” Screen

4. **Diagnosis** – Through this function the user has access to the DT303 diagnostic parameters. This function is enabled when the DT303DTM is online. The user level access for this function is “Operator”.

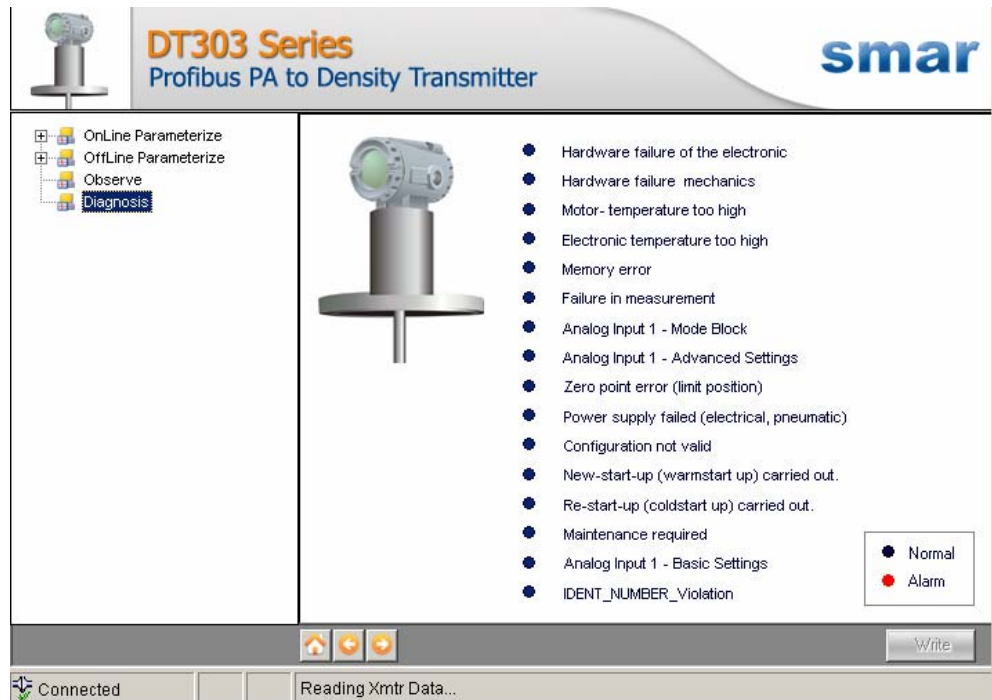


Figure 6 – DT303DTM “Diagnosis” Screen

5. **Upload** - This function reads the DT303 parameters and updates the DT303DTM database with the recent values. This function is enabled when the DT303DTM is online. The user level access for this function is “Maintenance”.
6. **Download** - This function writes the parameters configured in the DT303 **Offline Parameterize** function. This function is enabled when the DT303DTM is online. The user level access for this function is “Maintenance”.