FP303DTM



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<image/>	FP303 Series Profibus PA to Pneumatic Signal Converter
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web: www.smar.com/contactus.asp

INTRODUCTION

FP303DTM is from the family of Smar's PROFIBUS DTMs. With FP303DTM is possible to have access to many functionalities of FP303 converter:

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

For further details about the topics above, refer to the FP303 manual.

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FP303DTM

Pre - Requirements

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

Installation

To do the FP303DTM 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 <u>http://www.smar.com/support.asp</u>. The user has to do a login at site.

FP303DTM could be integrated in all frame applications that comply with the version 1.2 of the FDT/DTM standard.

Topology

After FP303DTM 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 first element from physical topology), the FP303DTM is the last element of topology (represents the FP303).

In many cases, is necessary a DTM gateway type (responsible for communication protocol conversion). The FP303DTM 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 FP303DTM to online, verify in the topology, if the address set in FP303DTM is the same of the FP303 device address. If it is not, change to the correct address through the DTM communication.

While the FP303DTM 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 FP303:

- 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 device.

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.

FP303 Series Profibus PA to Pneumatic Sign

In the figure below, the FP303DTM Online Parameterization navigation tree can be seen. The other

Figure 2 – FP303DTM navigation tree

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

LOIO. They allow go

The communication status can be verified - connected or disconnected:

🍄 Connected 🛛 🚸 Disconnected

options also appear.

FP303DTM Functions

Below we have a brief description about each FP303DTM function.

 Online Parameterize – This function is used to do the FP303 online parameterization, is enabled when the FP303DTM is online. The user level access for this function is "Operator" (read only) and "Maintenance" (complete access).



Figure 3 – FP303DTM "Online Parameterize" Screen

2. **Offline Parameterize** - This function is used to do the FP303 offline parameterization, the parameter values configured in this function can be written in FP303 through the **Download** function. The user level access for this function is "Maintenance".

FP303 Set Profibus PA to	ries o Pneumatic Signa	l Converter	smar
OnLine Parameterize OnLine Parameterize Ortfline Parameterize Online Online Parameterize Online Parameterize Online Parameterize Online Parameterize Online Online Parameterize O		Linearization Type Linearization Type Valve Type Valve Type Fail Safe Position Fail Safe Position Rate Values SP_Rate (Inc) SP_Rate (Dec)	No Linearization. Linear, sliding valve Not initialized 0,00 0,00
	<u>☆ ♀ ♀</u>		Default Save Write
C Disconnected			

Figure 4 – FP303DTM "Offline Parameterize" Screen

3. **Observe** – Through this function is possible monitoring the FP303 process variables. This function is enabled when the FP303DTM is online. The user level access for this function is "Operator".



Figure 5 – FP303DTM "Observe" Screen

4. **Diagnosis** – Through this function the user has access to the FP303 diagnostic parameters. This function is enabled when the FP303DTM is online. The user level access for this function is "Operator".

FP303 Se Profibus PA	eries to Pneumatic Signa	al Converter
OnLine Parameterize OffLine Parameterize OffLine Parameterize Observe Observe Observe Oisgnosis		 Hardware failure of the electronic Hardware failure mechanics Motor- temperature too high Electronic temperature too high Memory error Failure in measurement Device not initialized (No selfcalibration) Selfcalibration failed Zero point error (limit position) Power supply failed (electrical, pneumatic) Configuration not valid New-start-up (warmstart up) carried out. Re-start-up (coldstart up) carried out. Maintenance required Characterization invalid IDENT_NUMBER_Violation
	☆ © 	Write
💱 Connected	Reading Xmtr Data	

Figure 6 – FP303DTM "Diagnosis" Screen

- 5. **Upload** This function reads the FP303 parameters and updates the FP303DTM database with the recent values. This function is enabled when the FP303DTM is online. The user level access for this function is "Maintenance".
- 6. **Download** This function writes the parameters configured in the FP303 **Offline Parameterize** function. This function is enabled when the FP303DTM is online. The user level access for this function is "Maintenance".