The T51x Configurator

Manual



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1. Introduction

Fieldbus International manufactures the Modbus to Profibus DP and PA protocol converters, the T510 and T511, and it provides the configuration software tool, the T51xConfig. It handles both devices and runs on a PC under Windows 7 or newer. T51xConfig gives you the opportunity to connect to the device and read the actual configuration parameters.

2. Requirements

To use the T51xConfig you will need the following:

- A PC running Windows 7 or a newer version;
- A Micro-A or Micro-B USB cable;
- A powered T51x device.

3. Installation

To install the software, click on the file setup.exe. Follow the on-screen instructions to complete the installation.

4. Start Application

Following the installation, you will be met with the Main Window, see Figure 1.



Figure 1. The Main Window

When you start the application, it will check the COM port settings for previous used COM port and COM port connection. If there are no COM port settings, you will be able to choose COM port. To change COM port settings, select the *"Settings"* tab.

When COM port is chosen, it will be saved. And the next time you open the application, it will try to automatically connect to the saved COM port.

See more about COM port connection below.

5. Serial port interface

The serial port interface gives you the opportunity to connect to all T51x devices. With this interface you are able to connect to the device using the USB cable and read information, for example Device type, Software version and Hardware version, see Figure 2.

Product Type:			T511	
Hardware Version: Software Version:		rsion:	V 1.2	
		sion:	M1.5 C2.2	

Figure 2. Device information tab.

5.1. Connecting to the COM port

First, choose the COM port for your connected USB, see Figure 3. If your COM port is not displayed on the list, press button *"Refresh COM Ports"*. After the COM port is selected, press *"Connect to COM port"*. If the device is properly connected and everything works as it should, you will see status "Device is connected" and information about the connected device on the top of the *"Settings"* tab.

If you get an error message, make sure to try the following:

- Press button "Connect to COM port" one more time;
- Check that the selected COM port is correct. Take a look at the Device *Manager* under *Control Panel* in Windows and look for your USB port under *Ports*;

O A

- The device is powered;
- Double-check USB cable connection;
- Check that the USB driver is installed successfully.

art-up Settings Device Info		
Device is not connected	Select COM port:	
Connect to COM port	· · ·	
	COM3	
Disconnect from COM port	COM1	
	COM17	
Refresh COM Ports	COM29	
	COM30	
	COM18	

Figure 3. Selecting the COM port.

6. Configurator interface

To start the Configurator interface, press button *"Start Configurator"* on the Main Window, see Figure 1.

This application supports only the Configurator interface for T51x devices. If you are using another device, the Configurator interface will not start and you will receive a warning message.

If everything works as it should, a new window will show up and you will see the Configurator interface as shown in Figure 4.

If you get an error message, see Chapter 6.1.

Device Channel Profibus Setup Modbus Setup Diagnostic Target mode OS Toggle Target Mode Actual Mode OS Target mode Tag PXC_GW_DP_MODBUS PXC_GW_DP_MODBUS Software revision M01.00C01.00 Hardware revision Device serial number 2222 Virite Locking Not write protected v
Profibus Setup Modbus Setup Diagnostic Target mode OS Toggle Target Mode Actual Mode OS Target mode Tag PXC_GW_DP_MODBUS PXC_GW_DP_MODBUS Software revision M01.00C01.00 PXC_GW_DP_MODBUS Hardware revision 99.99 PXC_GW_DP_MODBUS Device serial number 2222 PXC_GW_DP_MODBUS Vrite Locking Not write protected v V
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Software revision M01.00C01.00 Hardware revision 99.99 Device serial number 2222 Write Locking Not write protected
Hardware revision 99.99 Device serial number 2222 Write Locking Not write protected v
Device serial number 2222 Write Locking Not write protected v
Write Locking Not write protected v
No function y
Factory reset
Ident Number Selector Manufacturer Specific v
Apply Refresh

Figure 4. Configurator interface window.

6.1. Connect to Configurator: Warning messages

WARNING MESSAGE	EXPLANATION
"PLEASE CONNECT TO THE DEVICE"	Check your COM port connection, see Chapter
	Serial port interface
"CONFIGURATOR MODE IS NOT AVAILABLE"	This is not the T51x device, check your product
	type on the "Device Info" tab, see Figure 2

7. Configurator: Device settings

The "Device" tab contains the general device settings, Modbus interface settings and information about the connected device. The "Profibus Setup" tab includes both general device settings and Profibus specific settings.

At the bottom of all tabs in the Configurator window you can find two buttons "Apply" and "Refresh". Press the **"Apply"** button to write and save changes to the device or press the **"Refresh"** button to read device settings.

7.1. Writing settings to the device

In the "Profibus Setup" tab is the Device Mode displayed and you can switch Device Mode between Auto and OS (Out of Service), see Figure 4, Button "Toggle target mode".

The parameters from "Profibus Setup" and "Modbus Setup" can be applied when the device is not in OS mode, see "Profibus Setup", "Actual mode" parameter, and when the device is not Write Protected, see "Profibus Setup", "Write Locking" parameter. And when the device is in OS mode you can change settings and press "Apply" button to save the new settings.

Note: If the device is in **Auto mode**, no changes can be made, but you can set the device mode by clicking "Toggle Target Mode" button.

8. Configurator: Channels

The Channel menu allows you to configure Modbus interface and various types of the Modbus data blocks.

The Channel menu supports following Modbus data blocks:

- Primary variable;
- Instruments registers;
- Input block;
- Output block;
- Status register.

How to arrange for transfer of the Modbus data is described in the **Reference manuals** for T510 and T511.

Note: If the Channel is in **Auto mode**, no changes can be applied, but you can set the device mode to Out of Service, OS, by clicking "Toggle Target Mode" button.