

SmarConf™-W User Guide

Rev-01

Contents

Introduction.....	1
The SmarConf™-W package contains:.....	1
Installation.....	1
Communicating with a transmitter	2
Setting up the Operating Mode.....	2
Interface operating modes.....	3
The SmarConf™-W8.....	4
First steps using the SmarConf™ HART® Configurator Online	5
Troubleshooting	7
How to confirm that the drivers for the HART®-to-USB interface is installed.	7
The SmarConf™ HART® configurator cannot find the interface.....	8

Introduction

The SmarConf™-W is a USB-to-HART interface that comes bundled with the SmarConf™ configuration software. It is a complete solution for communicating with HART® slave devices. It can be used to configure and maintain a large variety of field transmitters from Smar or other manufacturers.

The SmarConf™ is a HART® configuration software that works on computers running Windows 7 or higher versions. The user can use this software in the Online or Offline mode. A configuration prepared in the Offline mode can be saved for later use when connected to the device. However, during an Online configuration, the user can test every individual change performed while directly connected with the device. This is an instant way to check the reaction on taken step.

The SmarConf™-W package contains:

- **SmarConf™-Workbench** – It is a USB-to-HART industrial isolated interface with a built-in software license key to run the software.
- **CD-ROM** – Comes with SmarConf™ HART® configuration software and drivers for the USB interface. When you run the installation program from the CD-ROM, the configuration software and all necessary drivers for the USB port will be automatically installed. Find below in this guide to find out how to setup your computer correctly.
- **Quick-Start** – A small flyer with the initial steps to have this product working

Installation

Minimum requirements:

- A computer with an available USB 2.0 compatible port with Windows 7 or higher version installed.
- Minimum computer RAM of 4 GB.
- An Internal or a Plugin CD-ROM to run the installation software.
- At least 500 MB of Hard-Drive or SSD free space.
- Installation steps:

Note: You can only install these files if you agree with the all the terms and conditions presented to buy the installation wizard.

- Verify if all the minimum requirements are satisfied
- It is recommended to close all your applications.
- DO NOT connect the USB interface to the computer
- Feel free to scan the CD-ROM with your Anti-Virus scanner
- Put any Anti-Virus software in the Pause Protection status before starting the installation.
- Insert the CD-ROM in the bay and close the lid.
- If the installer does not start automatically. Use “File Explorer” to browse the CD contains and in the root folder double click on the SETUP file.

Follow all the step of the installation wizard till it completes the installation. DO NOT INTERRUPT THE INSTALLATION PROCEDURE.

Communicating with a transmitter

Connect the USB-to-HART® interface in an available USB port in the computer

If there is a speaker installed, you may hear a sound that the interface has been recognized by the computer. Now you need to decide which mode of the USB-to-HART® interface do you need. See figures under “Interface Operating Modes”

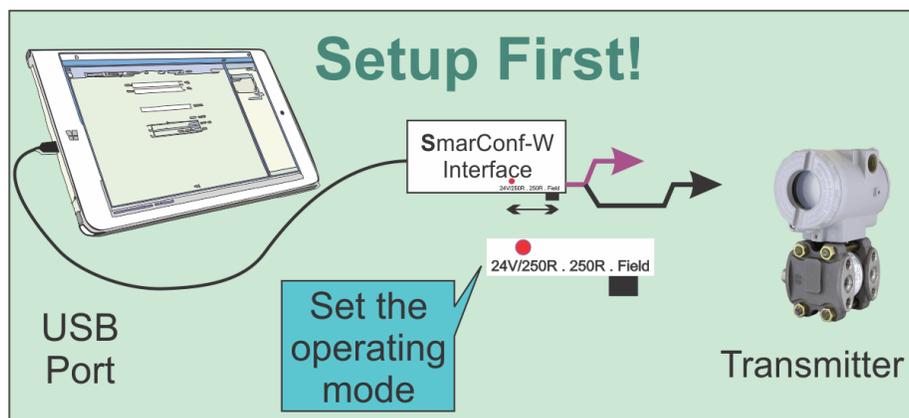
Make connections accordingly with the chosen operation mode

Now, start the SmarConf™ configurator software. For help use menu **Help** -> **Contents** in the configurator application.

Setting up the Operating Mode

The SmarConf-Workbench comes with 3 operating modes. It is a must that the SmarConf-Workbench interfaces has the correct Operating mode initially selected.

There is a switch in the side of the interface to select the operating mode. Make sure you set the right mode before it is connected to the transmitter. Most typical, a wrong mode selection will not cause any damage, however it may case communications errors.

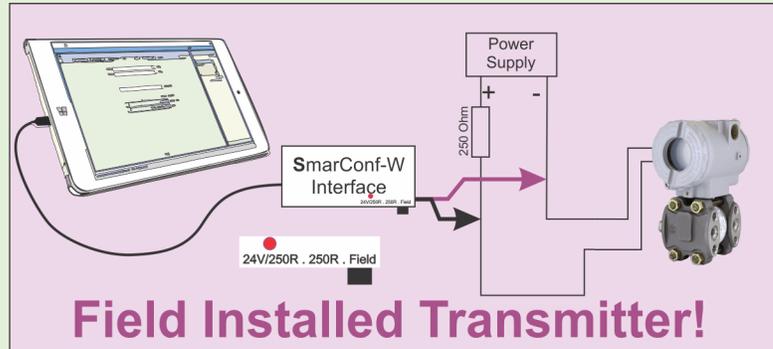


1- SmarConf-W operating mode switch detail

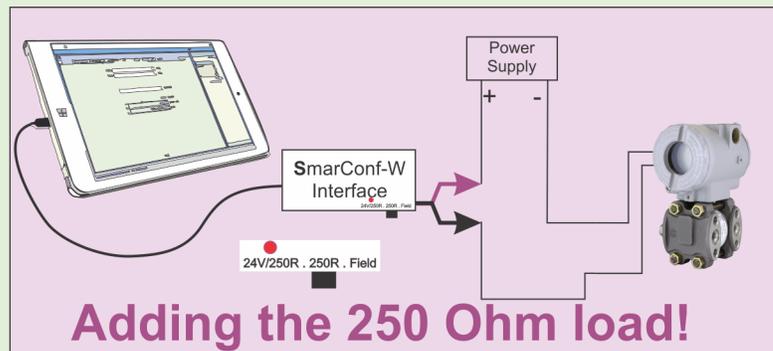
Interface operating modes

The SmarConf-W interface offer the possibility to work in three different modes. Use the side sliding switch to select the desired working mode. See below a brief explanation and connectivity used for each available mode.

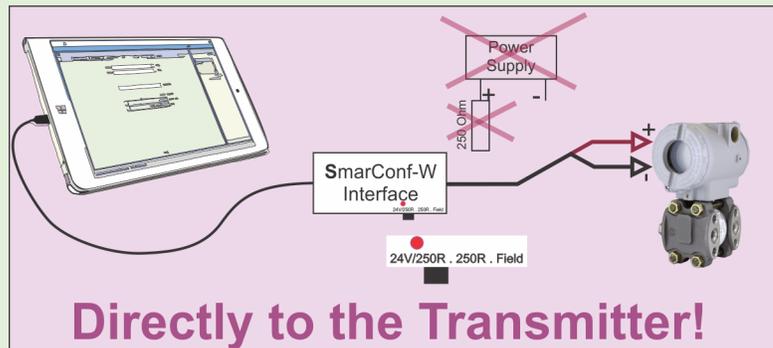
Mode 1) Regular field mode.
Connect to a transmitter that is wired accordingly with the installation guidance for a HART® device. Transmitter must have a Power Supply and a minimum load of 250 Ohm resistor in the loop.



Mode 2) Transmitter must be connected to a Power Supply, however the interface SmarConf™-W will provide the internal 250 Ohm resistor.



Mode 3) Great for the workshop or during a demonstration. The interface will provide Power and the 250 Ohm resistor for the transmitter.



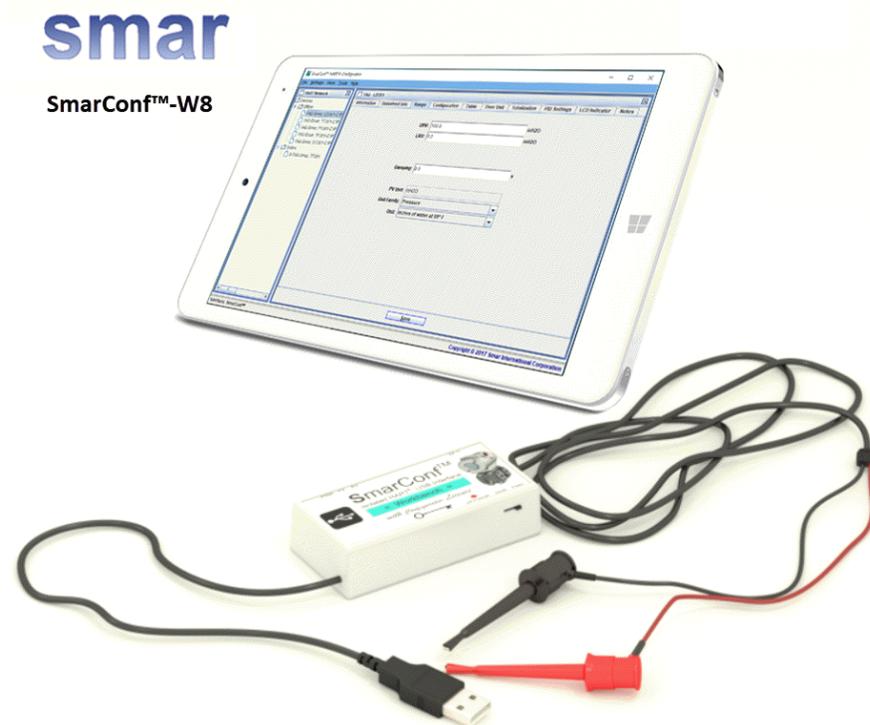
2- SmarConf-W interface connectivity modes

The SmarConf™-W8

The SmarConf™-W8 - It is an extended version of the SmarConf™-W. Additionally, it is bundled with an 8" full functional WIN10 tablet. It comes loaded with the SmarConf™ Configuration software and USB driver for the interface.

This is a complete portable solution!

All the information above is also useful for this version. Except that the files on the CD-ROM must be copied to a Flash-Memory-Stick, in case you need to reinstall the software and drivers to the tablet.



First steps using the SmarConf™ HART® Configurator Online



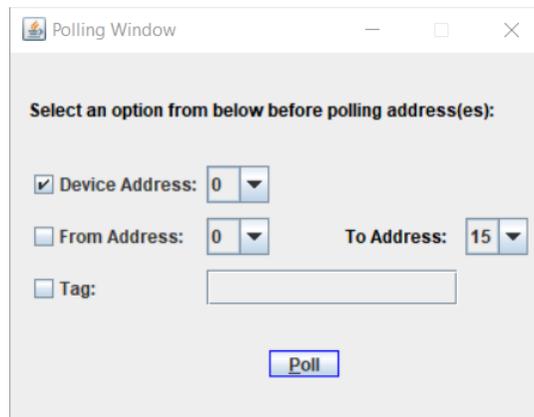
Find the application icon and open the configurator.

If you need to communicate with a HART transmitter, make sure the interface is connected to the computer USB port and the other side to a transmitter.

When the Configurator opens, it will verify if the Smar interface is connected to the USB port. The application will look for the built-in license code and continue if it is correct.

Now, in the opened window, under “Devices”, right click on “Online” then click on “Polling Window...”

Use the following dialog box to select the polling address(es)



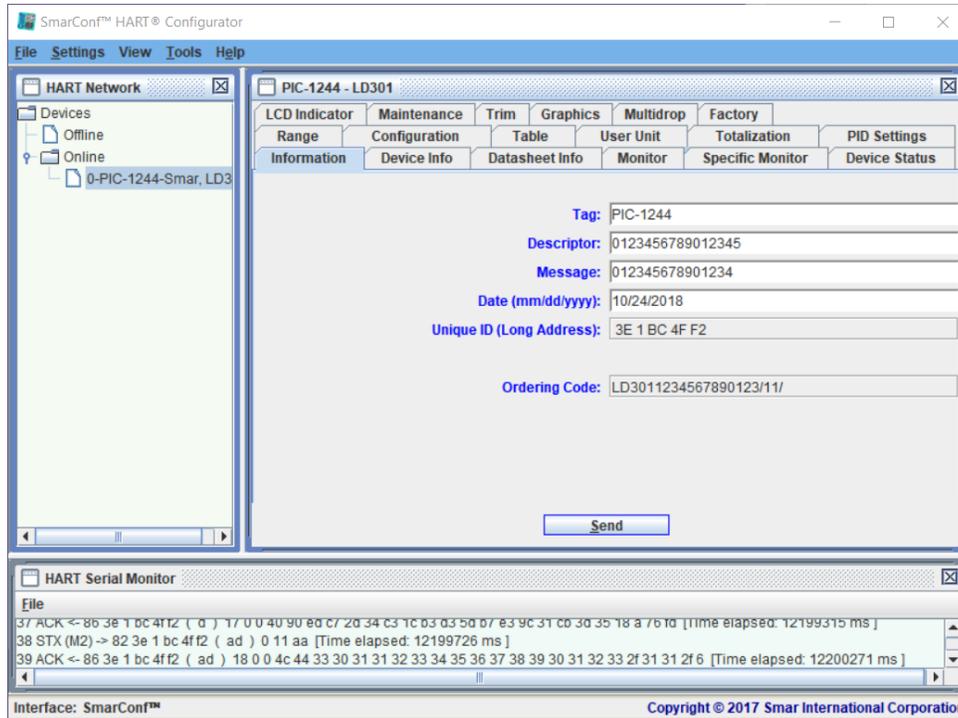
The image shows a 'Polling Window' dialog box with the following fields and options:

- Select an option from below before polling address(es):**
- Device Address:** 0
- From Address:** 0 **To Address:** 15
- Tag:** [Empty text box]
- Poll** button

If a transmitter or more are found, they will be listed under “Online” folder in the left side of the application.

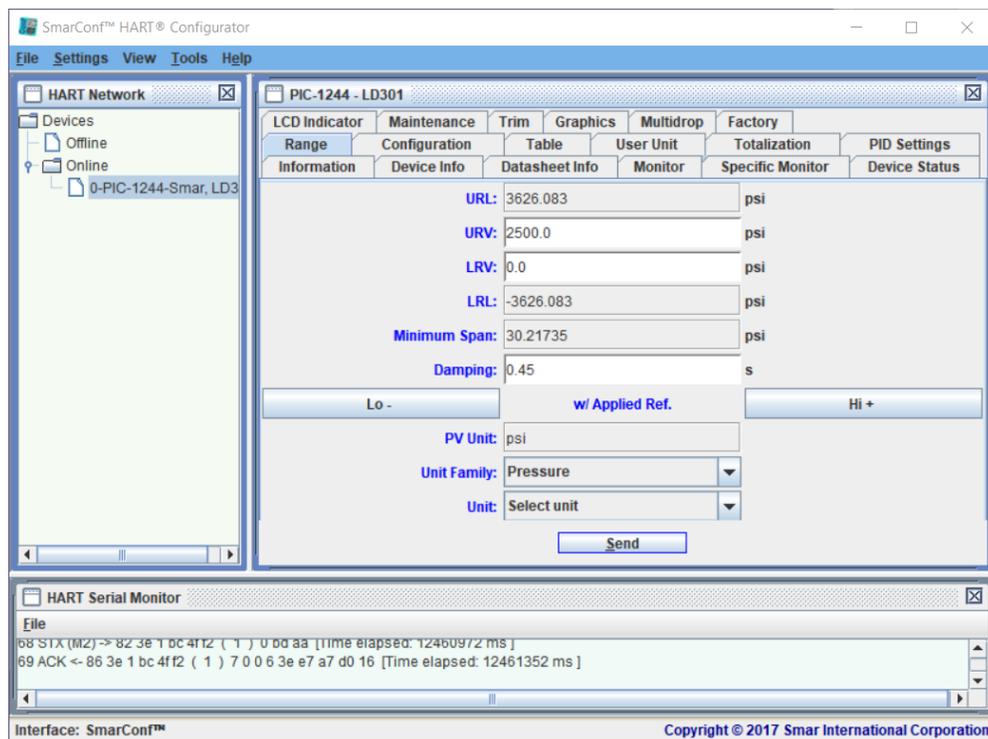


Now double click on the desire transmitter and wait for the parameters to be loaded to the right.



Select the tab of interest and proceed with your work.

For instance, if you select the Range tab, you will see something like



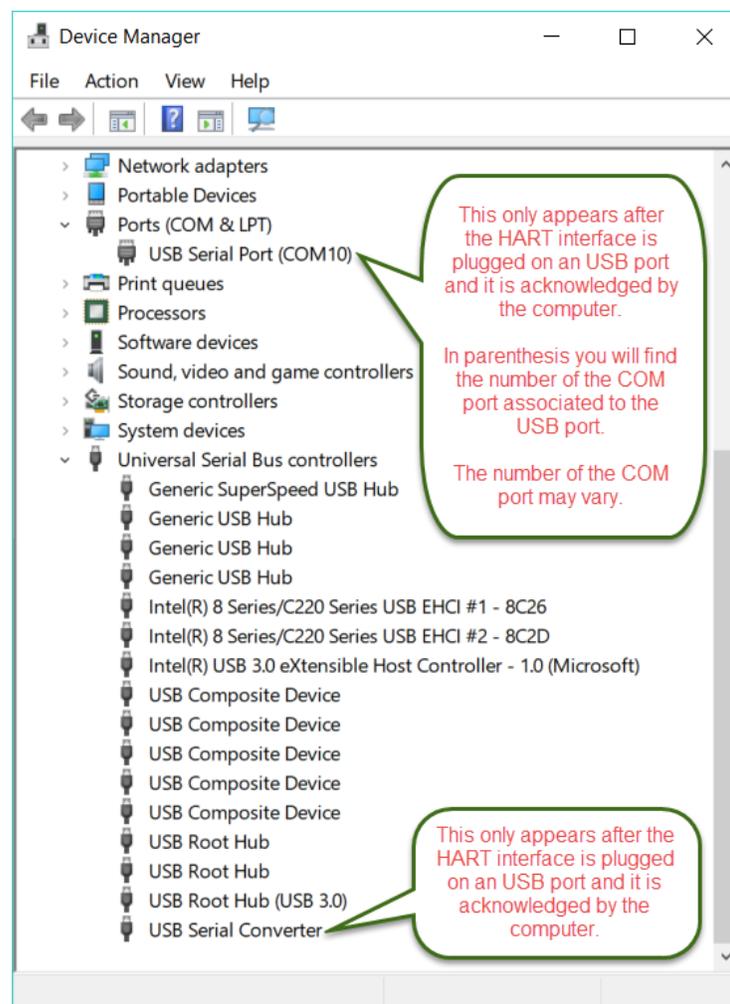
Troubleshooting

How to confirm that the drivers for the HART®-to-USB interface is installed.

If the SmarConf™ HART® configurator was installed using all the defaults while running the wizard, the drivers for the interface are supposed to be correctly installed.

To verify if the computer recognizes the interface, do the following:

- Plug the HART-to-USB interface in one available USB port in the computer. (You may hear a sound)
- Open Windows “Device Manager”
- Look for the line that says “Port (COM & LPT) and expand it.
 - You must see at least a subline like: “USB Serial Port (COMxx)
- Also, go ahead and expand line “Universal Serial Bus controllers”
 - You also must see a subline like: “USB Serial Converter”



If both mentioned lines do not show in the Device Manager after installation when the HART-to-USB interface is plugged, it is recommended to reinstall the application and follow the wizard careful during all steps.

If one of these lines is still not showing when the interface is connected, then talk with your Computer Administrator or an IT for guidance.

The SmarConf™ HART® configurator cannot find the interface

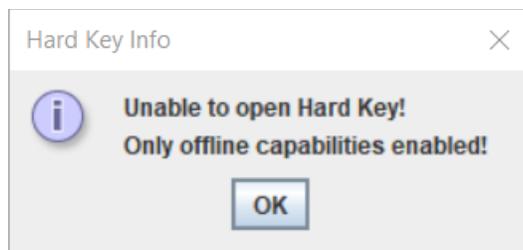
With the application opened go to menu **Settings -> Communication Port...**, if you don't see the dialog below showing the Port options: SmarConf™ try this:

Check the interface connection to the USB port and click on the Refresh button

If SmarConf™ does not appear at Port options, go to Windows Device Manager and see what the COM port is associated to the USB. See figure above.

Now use the drop-down arrow and select the COMxx that was associated to the USB interface.

Then click OK if the message like the following one appears, means that the interface is not recognized yet!



If you decide to use the Configurator Offline, just click OK and continue to use it.

If you need to do an Online configuration, this interface connection problem must be resolved. The interface has a built-in license key to run the SmarConf™ software Online.

You may find interesting sharing knowledge in the FAQs (Frequently Asked Questions) section at www.smar-usa.com.