smar

HART® Device Configuration

When comes to configuring HART® devices SMAR offers a good range of solutions.

To make the subject clear, we need to separate hardware and software for these configuration tools.

THE SOFTWARE

The software will be an application that runs in a computer and will perform the visual interface with the user. Typically, it is also prepared to interface with field devices, if a proper interface is plugged in the serial or USB port of the computer.

SMAR software for doing HART® configuration is called SmarConf™.

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 to every step taken.

Besides it also works with other devices in the market, it is loaded with extended features to help specific maintenance and troubleshooting for the Smar devices.

Different ways to get the Interfaces and the Configuration Software

Stand-alone

SMAR licenses the SmarConf™ configurator in two different ways. It can be sold as a stand-alone software or bundled with a SMAR HART® hardware interface.

The same thing applies for the HART® Interfaces. They can be acquired separately or bundled with the configuration software.

Getting the stand-alone configuration software means that only the software and license dongle key are provided. In this case, it is up to the user to get a universal type of HART® interface to make the connection between computer and device. Of course, this interface should also be compatible with the same computer and operating system needed to run the SmarConf™ software.

Bundled with a SMAR interface

The other way is to get the SmarConf™ bundled with a HART® interface. In this option, the software comes together with a SMAR interface with a built-in license key.

No more concerns having a separated license dongle key once the software license key comes built-in to the SMAR interface itself.

This solution allows you to install the SmarConf™ software in various computers. All you need to do to use it Online is to connect the SMAR HART® interface, that has the built-in license key, in the computer port.

THE HARDWARE

This refers to an electronic interface between the computer and the HART® devices.

Smar International offers HART® interfaces to be connected to a Serial or USB port of a computer running Windows® 7 or higher.
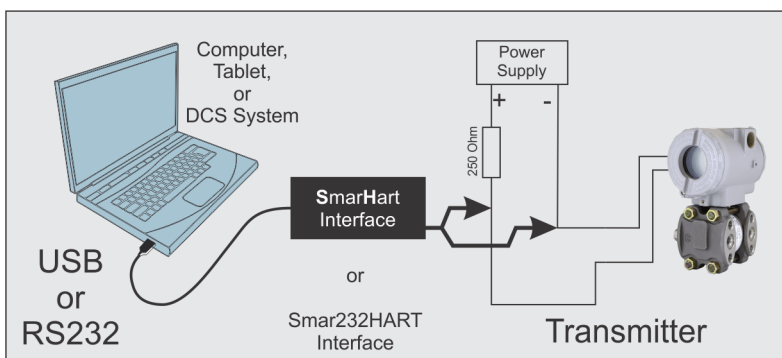
It is important to understand each individual option as they are explained below.

All the following HART® interfaces are galvanically isolated from the process and comes with line surge protection.

SmarHART™-F - It is an industrial universal USB to HART interface. It does NOT come with a configuration software of any kind. However, it is packed with a CD containing the USB drivers and can be used with third party software that accepts universal type of HART® interfaces.

SmarHART™-W - It is an industrial universal USB to HART interface. It is a feature enhanced version of the SmarHART™-F. It includes 2 extra operating modes. One to provide a 250 Ohm resistor and other that also provides power for one transmitter. It does NOT come with a configuration software of any kind. However, it is packed with a CD containing the USB drivers and can be used with third party software that accepts universal type of HART® interfaces. Just connect it to a transmitter and you are ready to go!

Smar232HART™-F - It is an industrial universal RS232 to HART interface alone. It does NOT come with a configuration software of any kind. You will need an available RS232 port to plug it in the computer. It can be used with third party software that accepts universal type of HART® interfaces.

THE BUNDLES (HARDWARE AND SOFTWARE)

SmarConf™-F - It is an industrial universal USB to HART interface that is bundled with a full SmarConf™ configurator software for complete device configuration, maintenance, and troubleshooting.

The interface carries a built-in software license key to validate the Configurator operation. In this way, you do not need to license the Configuration software in every computer. Just install the Configuration software in the computers that

you are interested. When necessary, just plug this USB to HART interface to connect Online to a transmitter. If you use the Configurator Offline you don't need to connect the interface.

SmarConf™-W - It is an extended version of the SmarConf™-F. In this case. the USB-to-HART interface features 3 convenient operating modes:
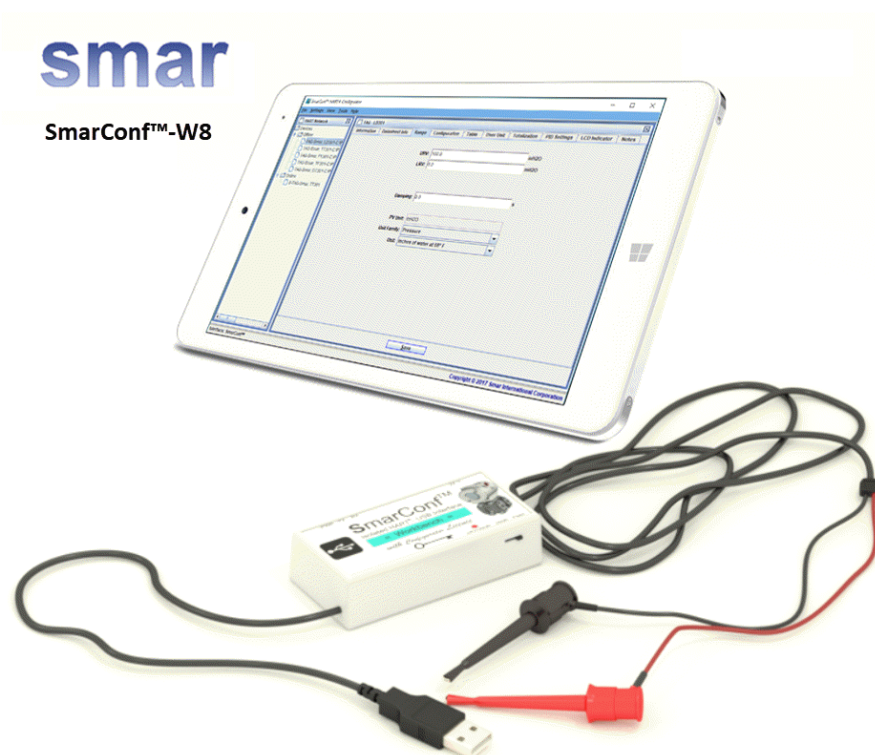
Mode 1) Regular field mode. Connect to a transmitter that is wired accordingly with the installation guidance for a HART® device. Transmitter must have a Power Supply and a minimum load of 250 Ohm resistor in the loop.

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.

"Just connect the 2 cables from the SmarConf™-W interface to the transmitter and you are ready to communicate!"

SmarConf™-W8 - It is an extended version of the SmarConf™-W. Additionally, it is bundled with an 8" full functional WIN10 table. It comes loaded with the SmarConf™ Configuration software.
This is a portable solution!

The table may not be appropriate to use in your area depending on the classification needed.