

WirelessHART® Starter kit, ST81

Content:

- 2/5/10 WirelessHART interface cards
- One WirelessHART gateway
- HART Master Software (PC)

Application:

- Modbus® to WirelessHART® converters
- WirelessHART tutorial
- WirelessHART transmitter development
- Factory configuration



General description

ST81 is a tutorial kit for WirelessHART transmitter developers and users. It comprises PC tools, providing the human interface, two or more WirelessHART interface cards (T810) and the DUST/Linear WirelessHART gateway, LTP5903. Modbus instruments can be connected to the T810s to allow communication over the WirelessHART network.

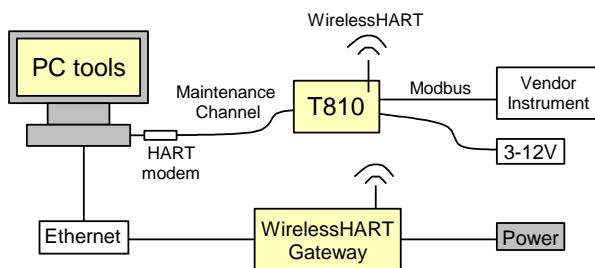


Figure 1. ST81 Set-up

ST81 is a kit suited for testing T810 and learning about WirelessHART. It provides an entry-level platform and guidance for instrument vendors seeking WirelessHART functionality in their products.

The Starter kit Master software is the SW02, running under all versions of Windows, demonstrating all features of HART and Wireless HART.

The software functionality exceeds Universal and Common Practice commands defined by HART, also utilizing device specific commands. These allow a vendor to fully exploit the HART protocol by adding functionality and thus get an idea of implementation opportunities.

The T810 is a **built-in board**. It supports the Modbus CMOS protocol (with adaptive logical level) for communication with the instrument. The Modbus communication needs to be configured to allow T810 to fetch Device Variables and Device Status from the correct registers within the instrument. The Primary Variable and three more dynamic variables can be mapped to any Device Variable by use of HART commands.

A simulation mode allows T810 to publish data even though no Modbus instrument is connected.

WirelessHART offers a wide spectre of conditions for publishing data. Any monitoring function can be served using these mechanisms, even on extremely low power budgets. T810 supports them all and SW02 allow the user to configure the T810 accordingly.

Event reporting is supported. This is suited for on/off applications and for failure reporting.

Address:

Fieldbus International AS
Ullern Alle 28
N-0381 OSLO
NORWAY

Phones: +47 22 13 19 10
Fax: +47 22 13 19 11
e-mail info@fint.no
<http://www.fint.no>

T810 features:

- ◆ 8 configurable Device Variables
- ◆ 4 Dynamic Variables: PV, SV, TV and QV.
- ◆ Dynamic Variables are mappable to Device Variables
- ◆ FSK Maintenance port for configuration
- ◆ Burst on Wireless channel
- ◆ Event Notification on Wireless channel (status reporting)
- ◆ Status Simulation
- ◆ Configuration of Modbus communication

Starter kit options (all including PC master software SW02)

ST81.1: Two T810 interface cards.

ST81.2: Five T810 interface cards.

ST81.3: Ten T810 interface cards.

The ST81 allows a fast and direct route to field trials and market-ready WirelessHART products.

T810 mechanical data:

Temperature range: -40 °C to + 85 °C

Size: 42 mm x 42 mm

Optional:

- ◆ HART Modem
- ◆ Battery package

Also available:

- ◆ Starter kit ST21, HART transmitter Starter kit

SW02 for configuration of the T810 by the OEM user

