FDI302-PLUS

smar – FDI302-PLUS

Fieldbus Communication Interface for Firmware Update to 302/303 Revamp Platform.

FDI302-PLUS

CPU 2
CPU 1

PROFI BUS

FOUNDATION

LED1
LED2

FDI302-PLUS
smar

SN 005000

smar

Field Device Interface

DEC / 16

FDI302-PLUS

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Specifications and information are subject to change without notice.
Up-to-date address information is available on our website.

web: www.smar.com/contactus.asp

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FDI302PLUS - FIELDBUS COMMUNICATION INTERFACE FOR FIRMWARE UPDATE TO 302/303 REVAMP PLATFORMS

Introduction

The FDI302Plus Smar interface, Field Device Interface302, allows firmware update of the FOUNDATION fieldbus and PROFIBUS-PA field devices using a computer and FDI302Plus utility software, available at Smar website.

Characteristics

- Compatible with DC302 and DC303 and also all revamp field devices of Smar 302 and 303 series;
- Powered by the computer, it does not need external power supply;
- USB connector;
- Easy and quick installation.

Functional Description

Smar FDI302Plus interface allows devices firmware to be updated very quickly and easily.

Technical Specifications

Technical Specifications
Power: 5V of USB connector
Compatible interface with USB 2.0
Available status LEDs
Operation temperature 0 to 50 ºC

Operation

1. Goal:
Download the firmware on plataforms 302/303 Revamp.

2. Required material
- The software "FDI302 Plus utility" installed in a computer;
- FDI302Plus Interface.

Any firmware of the Smar field devices, FOUNDATION fieldbus and PROFIBUS PA, 302 and 303 Revamp series, besides de DC302 Revamp can be updated.

Field Devices

To update the firmware of field devices follow the steps below:

Attach the USB connector of the **FDI302Plus** interface to the USB computer port. Remove the front cover of field device that will receive the new firmware. If the device has a display, it is not necessary to remove it.

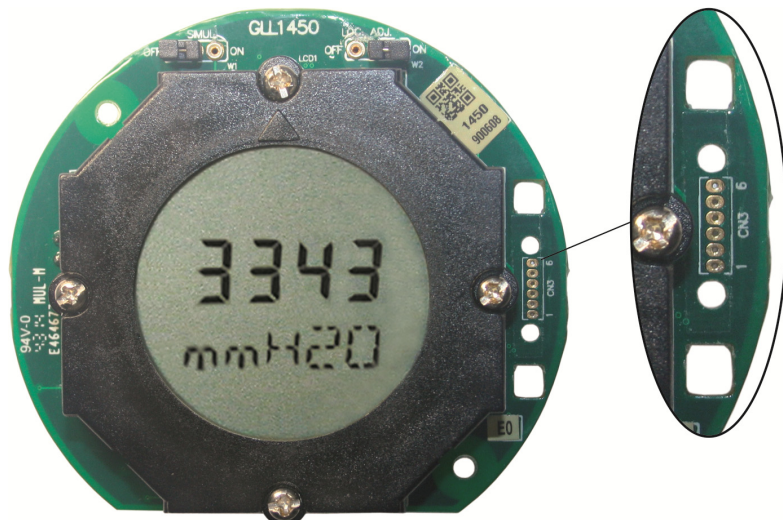Carefully attach the other end to the device interface according to figure 1.

Fig. 1 – Interface Connected to the Device.

Insert both guiding pins through the holes of the equipment's circuit board. See figures 2 and 3.

General view   Closer view
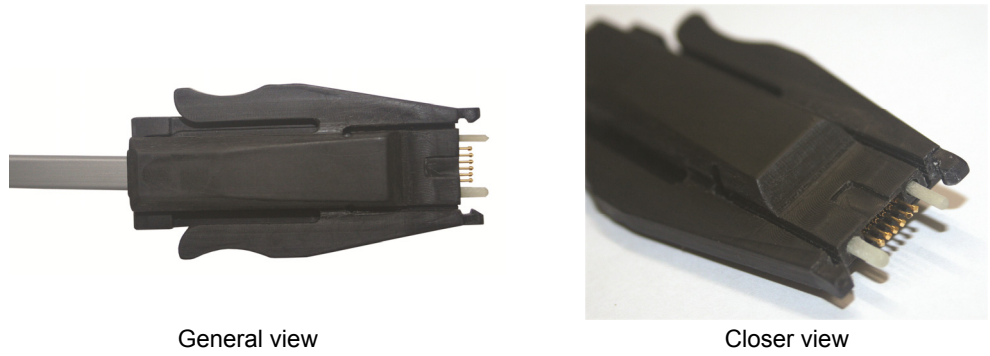
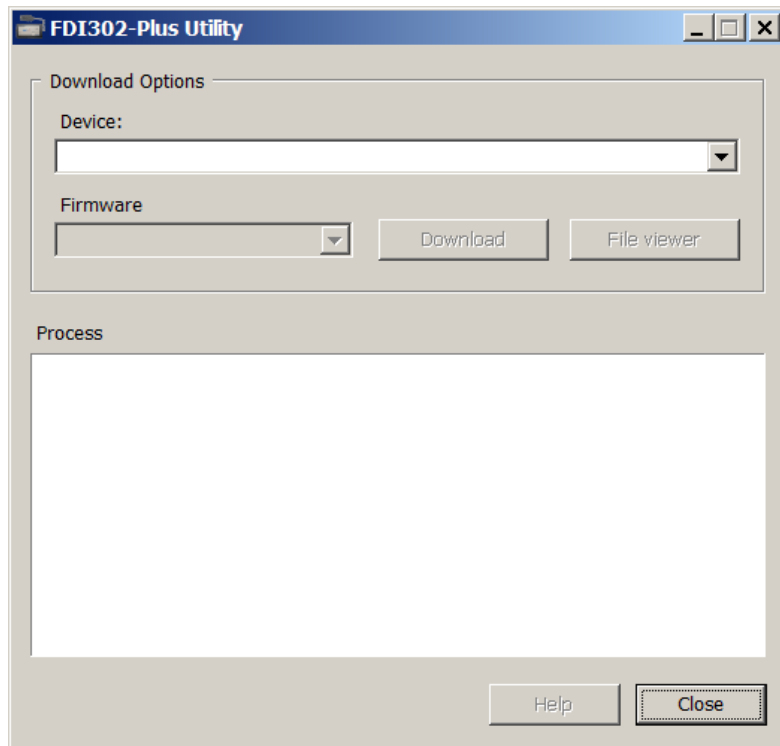*Fig 2 – FDI302PLUS-1 connection point with the field devices*

Figura 3 - Field device's connection point with FDI302PLUS-1
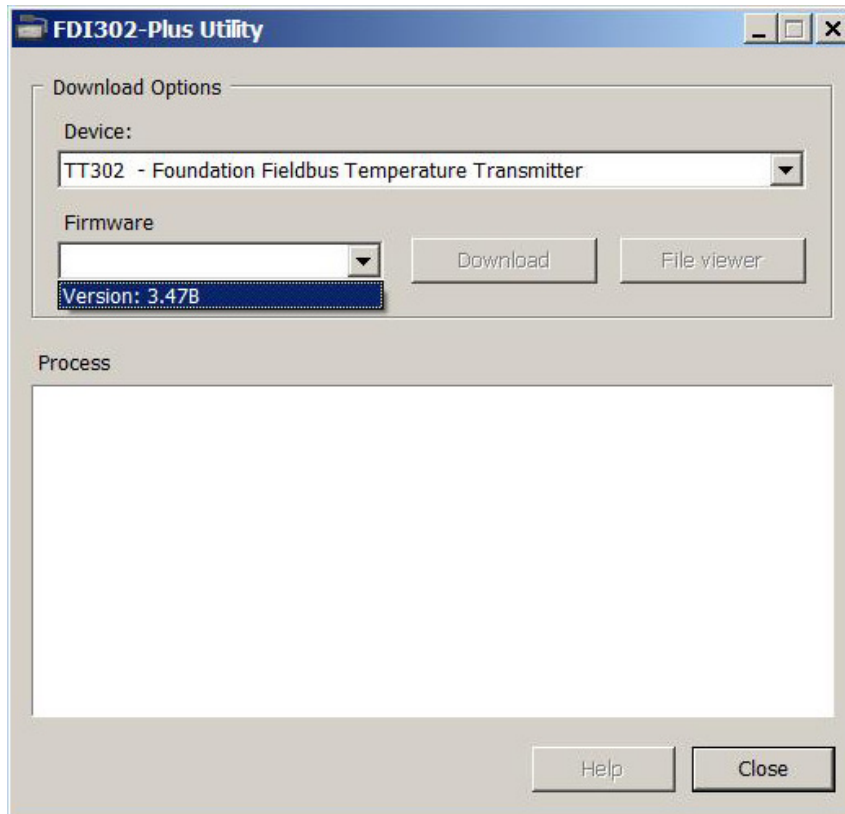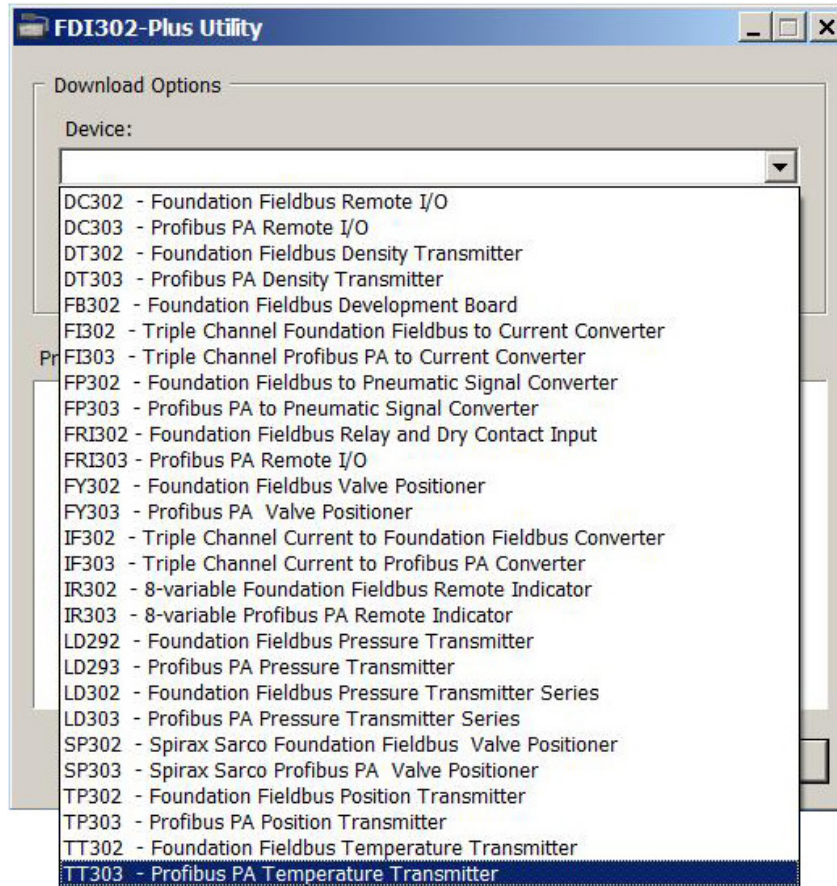
Description

The following figures show the interface connection on the cable and the cable connection with the GLL:
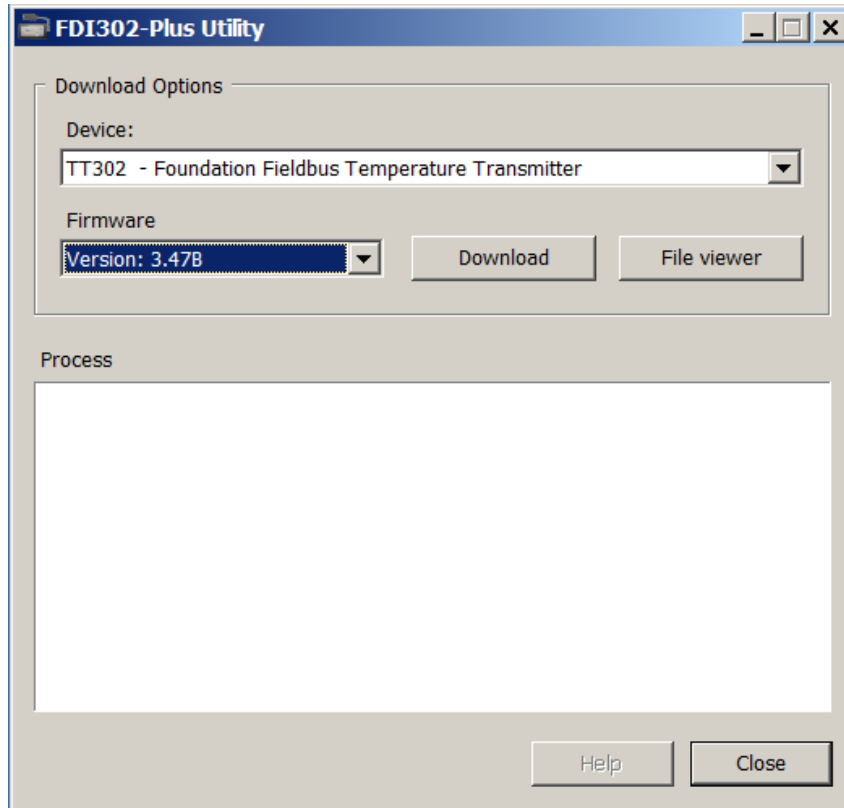
3.1. Connect the interface cable on the USB computer port..

3.2. The interface key should be on CPU1 position to write the firmware on CPU1.
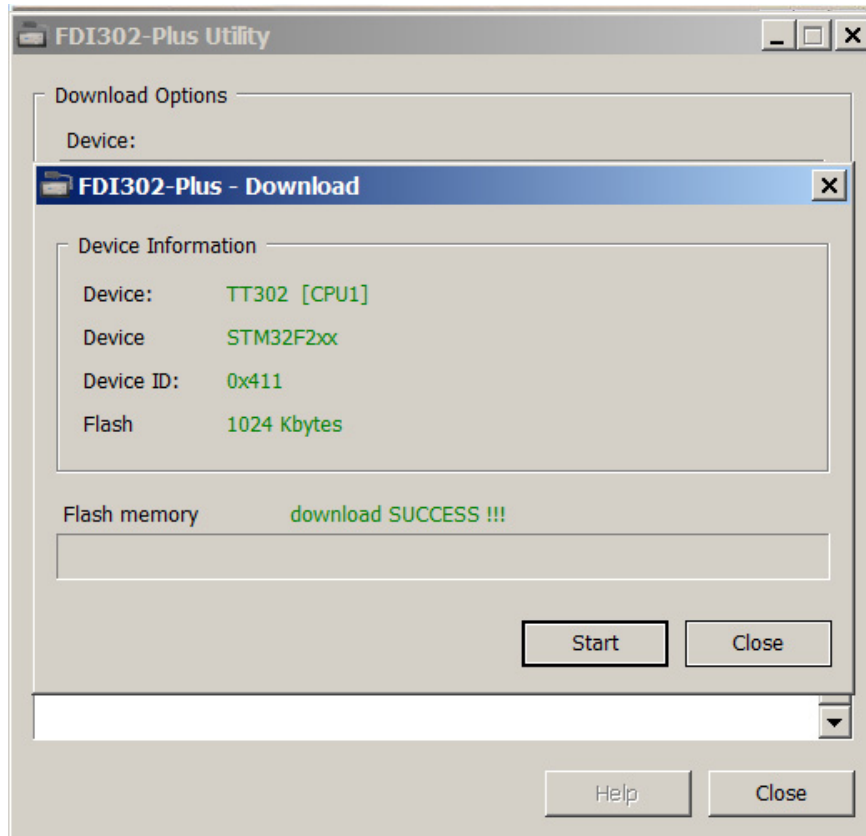
3.3. Execute the "FDI302Plus Utility" software:
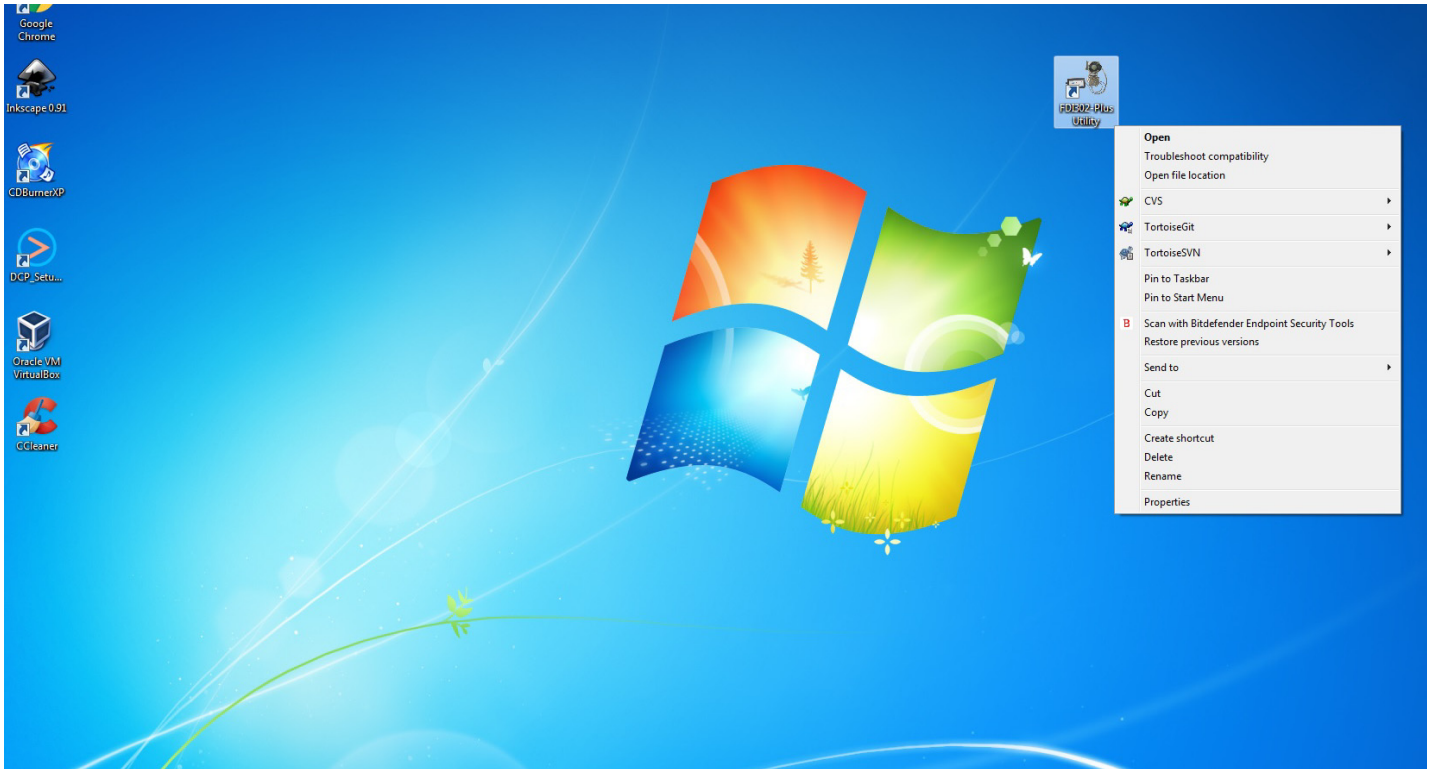
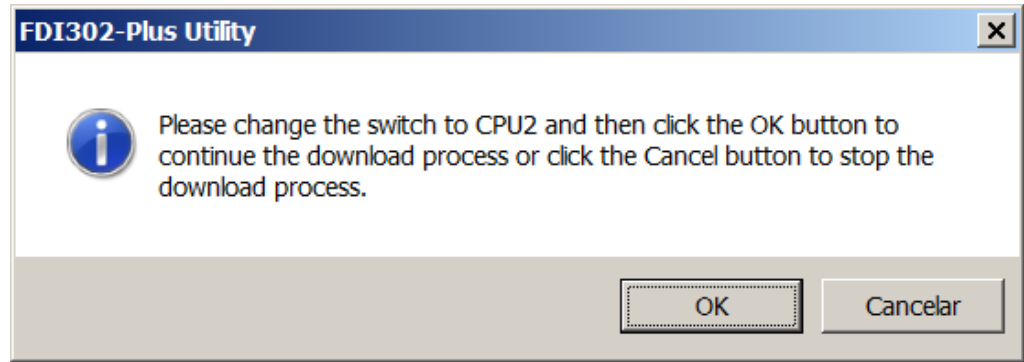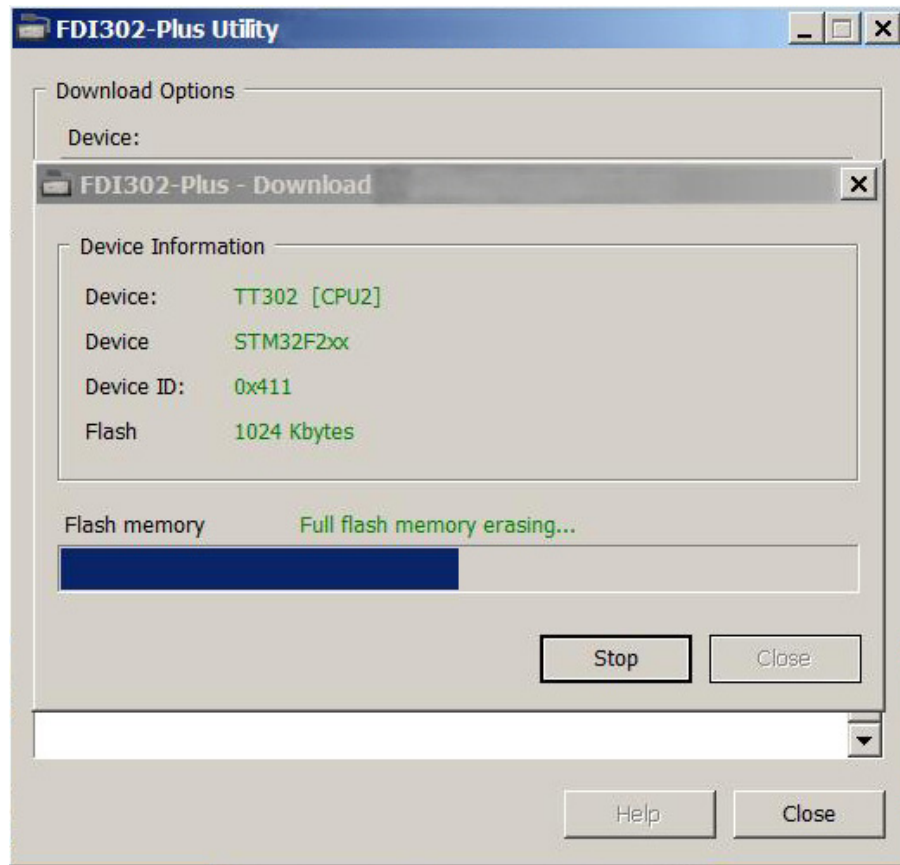**3.4.** Choose the connected device and the firmware version.

FDI302-Plus Utility

Download Options

Device:

DC302 - Foundation Fieldbus Remote I/O
DC303 - Profibus PA Remote I/O
DT302 - Foundation Fieldbus Density Transmitter
DT303 - Profibus PA Density Transmitter
FB302 - Foundation Fieldbus Development Board
FI302 - Triple Channel Foundation Fieldbus to Current Converter
FI303 - Triple Channel Profibus PA to Current Converter
FP302 - Foundation Fieldbus to Pneumatic Signal Converter
FP303 - Profibus PA to Pneumatic Signal Converter
FRI302 - Foundation Fieldbus Relay and Dry Contact Input
FRI303 - Profibus PA Remote I/O
FY302 - Foundation Fieldbus Valve Positioner
FY303 - Profibus PA Valve Positioner
IF302 - Triple Channel Current to Foundation Fieldbus Converter
IF303 - Triple Channel Current to Profibus PA Converter
IR302 - 8-variable Foundation Fieldbus Remote Indicator
IR303 - 8-variable Profibus PA Remote Indicator
LD292 - Foundation Fieldbus Pressure Transmitter
LD293 - Profibus PA Pressure Transmitter
LD302 - Foundation Fieldbus Pressure Transmitter Series
LD303 - Profibus PA Pressure Transmitter Series
SP302 - Spirax Sarco Foundation Fieldbus Valve Positioner
SP303 - Spirax Sarco Profibus PA Valve Positioner
TP302 - Foundation Fieldbus Position Transmitter
TP303 - Profibus PA Position Transmitter
TT302 - Foundation Fieldbus Temperature Transmitter
TT303 - Profibus PA Temperature Transmitter

FDI302-Plus Utility

Download Options

Device:

TT302 - Foundation Fieldbus Temperature Transmitter

Firmware

Version: 3.47B

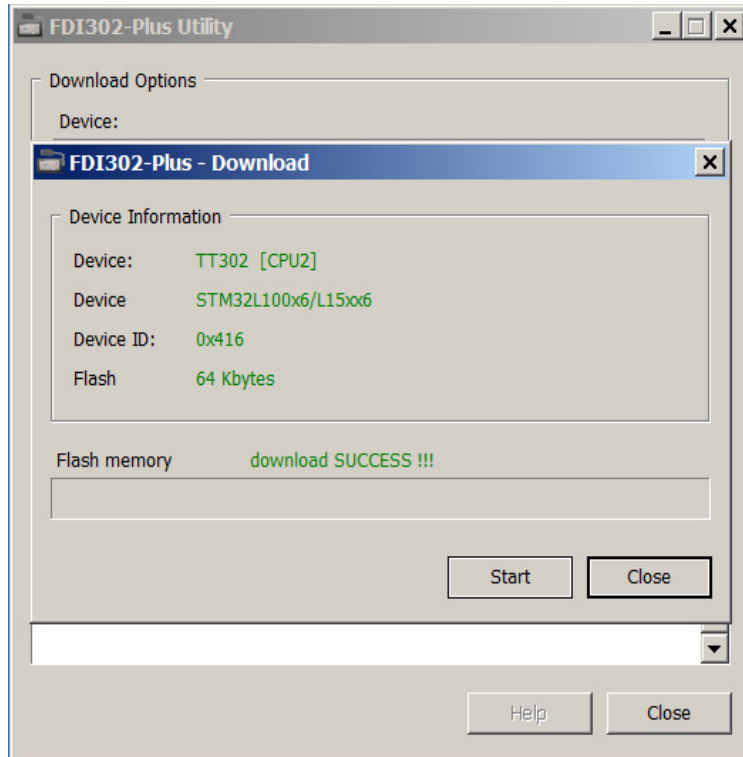Download   File viewer

Process

Help   Close

3.5. Click download

3.6. Put the interface key on **"CPU2"** position to write the firmware.

LEDs of Diagnostics - LED1 and LED2

The "**LED1**" and "**LED2**" on FDI302 frontal show the connection status.

LED2 green: flashing	USB connection (FDI302Plus) is been established with PC;
LED2 green: on	Communication between PC and interface is established .
LED1 red and LD2 green: flashing	Exchange data between interface and PC;
LED1 red: on	Last communication was successful;
LED1 red and and LED2 green: on	Communication failed between FDI302Plus and device;

Hardware Supported by FDI302Plus

The list of devices and respective GLLs supported by FDI302Plus.

Device	Revamp
	GLL
TT302/303	1450
LD302/303	1450
LD292/293	1450
TP302/303	1450
IF302/303	1450
FY302/303	1461
FI302/303	1462
DT302/303	1450
FP302/303	1463
SP302/303	1461
DC302/303	1467