

# Graphical user interface for the industrial IPS expansion boards for STM32 Nucleo



## Features

- Automatic identification of firmware version and application board
- Support for intelligent power switch (IPS) expansion boards
  - X-NUCLEO-OUT02A1
  - X-NUCLEO-OUT03A1, STDES-OUT03DO8
  - X-NUCLEO-OUT04A1, STDES-OUT04DO8
  - X-NUCLEO-OUT05A1, STDES-OUT05DO4
  - X-NUCLEO-OUT06A1, STDES-OUT06DO4
  - X-NUCLEO-OUT08A1
  - X-NUCLEO-OUT10A1
  - X-NUCLEO-OUT15A1
- Control of the expansion board from a PC/laptop via USB cable and STM32 Nucleo development board USART interface

## Description

The STSW-IFAPGUI graphical user interface is designed to facilitate the control of the industrial IPS expansion boards for STM32 Nucleo.

The common software engine embedded in the STSW-IFAPGUI lets you control different applications with the same GUI.

The automatic detection feature communicates with the firmware that runs on the STM32 Nucleo development board, which is connected via USB to a laptop or PC, and then opens the control window of the detected device.

The GUI is available free of charge on [www.st.com](http://www.st.com).

Product summary	
Graphical user interface for the industrial IPS expansion boards for STM32 Nucleo	STSW-IFAPGUI
Industrial digital outputs expansion boards	X-NUCLEO-OUT02A1/ X-NUCLEO-OUT03A1/ STDES-OUT03DO8/ X-NUCLEO-OUT04A1/ STDES-OUT04DO8/ X-NUCLEO-OUT05A1/ STDES-OUT05DO4/ X-NUCLEO-OUT06A1/ STDES-OUT06DO4/ X-NUCLEO-OUT08A1/ X-NUCLEO-OUT10A1/ X-NUCLEO-OUT15A1
Evaluation firmware for STSW-IFAPGUI and IPS expansion boards	STSW-OUT02/STSW-OUT3F4/STSW-OUT3G4/STSW-OUT5F4/STSW-OUT5G4/STSW-OUT8F4/STSW-OUT8G4/STSW-OUT3D8F4/STSW-OUT3D8G4/STSW-OUT5D4F4/STSW-OUT5D4G4/STSW-OUT15F4/STSW-OUT15G4
Applications	Industrial Safety Industrial Tools

## Revision history

**Table 1. Document revision history**

Date	Version	Changes
12-Nov-2018	1	Initial release.
04-Mar-2019	2	Added references to STSW-OUT02 firmware.
16-Jun-2020	3	Added X-NUCLEO-OUT08A1, X-NUCLEO-OUT010A1, STSW-OUT8F4 and STSW-OUT8G4 compatibility information.
15-Nov-2021	4	Added X-NUCLEO-OUT03A1, X-NUCLEO-OUT04A1, STSW-OUT3F4 and STSW-OUT3G4 compatibility information.
12-Apr-2022	5	Added X-NUCLEO-OUT05A1, X-NUCLEO-OUT06A1, STSW-OUT5F4, STSW-OUT5G4, STDES-OUT03DO8, STDES-OUT04DO8, STSW-OUT3D8F4 and STSW-OUT3D8G4 compatibility information.
30-May-2022	6	Added STDES-OUT05DO4, STDES-OUT06DO4, STSW-OUT5D4F4 and STSW-OUT5D4G4 compatibility information.
30-Jun-2022	7	Added STSW-OUT15F4 and STSW-OUT15G4 compatibility information.

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