EEZ Studio
Low-code GUI • T&M automation

EEZ Studio represents a unique solution when both rapid development of an attractive embedded GUI and remote control of devices for T&M (test and measurement) automation is required.

## Let's Flow into the touchable future

Advances in mobile telephony, among others factors, has led to a high adaptation rate of touchscreen GUI and it has become the user interface of choice for managing a wide variety of devices and gadgets. Creating an attractive and responsive embedded GUI for devices is becoming increasingly important. In times of increased efficiency, a reduction in development costs and a shorter development cycle are expected.

Embedded GUI design is enabled by visual "drag & drop" editor using ready made in-house developed Widgets and Actions. The popular open source multi platform LVGL is also supported.

Unlike similar solutions that offer drag & drop GUI design, EEZ Studio also offers rapid prototyping and creation of the complete final solution thanks to low-code EEZ Flow for adding complex program logic using flowchart-like programming.

In addition to visual editing, the project can also be executed directly in EEZ Studio without the need for the often lengthy build and upload to the target device. Visual debugger, single step mode and expressions watcher will further shorten the development time.

When used to create desktop applications (info kiosks, tutorials, etc.) it is possible to build a stand-alone runtime that is easy to install and run.
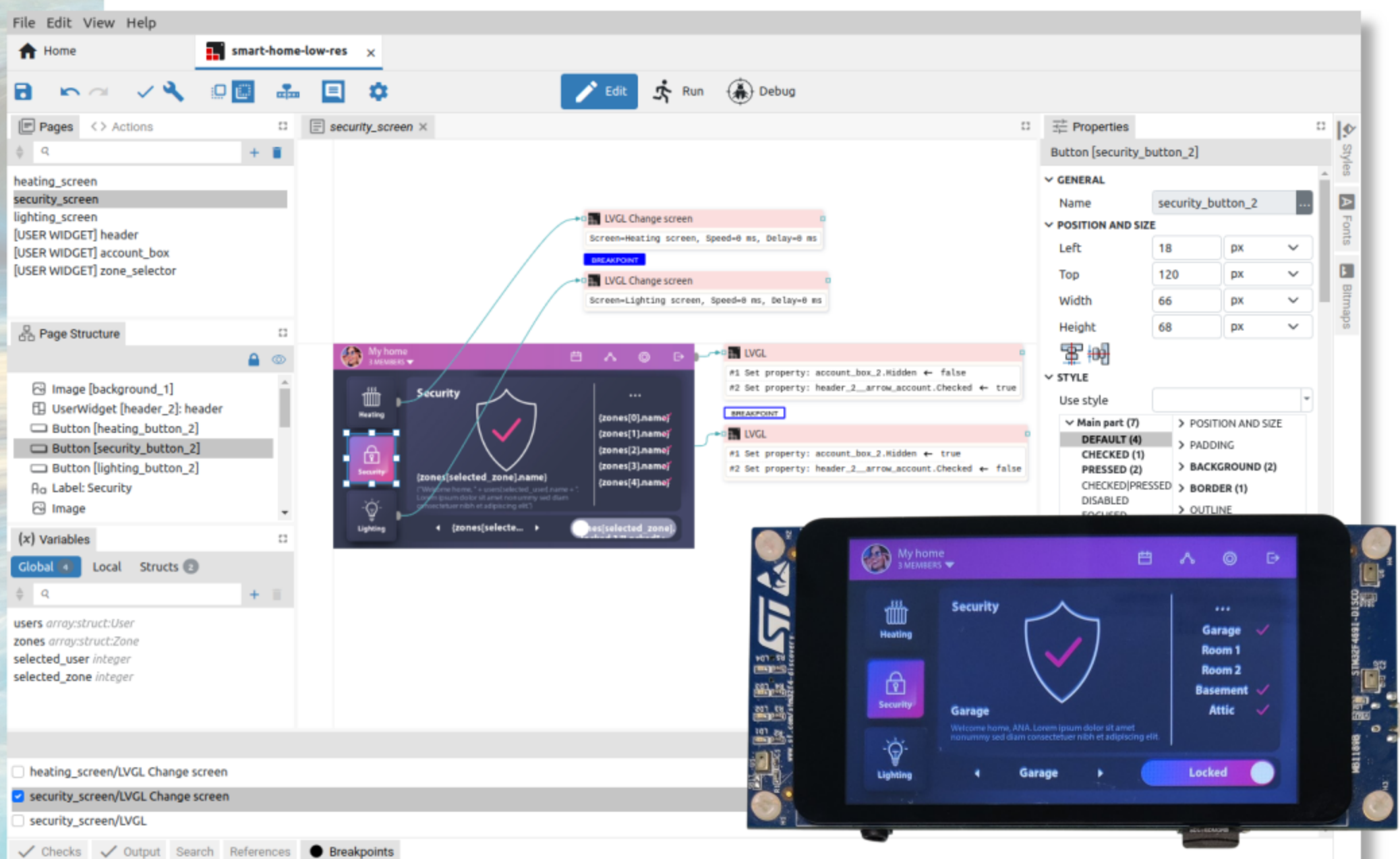
General features

– Cross-platform (Linux, Windows, macOS)
– Modern and attractive UI/UX developed in Electron
– 40+ ready-to-go project templates & examples
– Light / Dark theme
– Modular design (pluggable extensions)
– FREE and open source, GPL 3.0 license

EEZ Studio Project features

– Low-code flowchart-like programming
– Multilanguage support
– Visual debugger, expression watcher, single step mode
– Source/Version control integration (GitHub and gitea.io)
– Generate C++ code directly linkable to the target platform IDE (e.g. STM32CubeIDE, Arduino IDE , etc.)

EEZ Studio
Low-code GUI • T&M automation

Access multiple devices and T&M instruments from one place

Remote management of T&M (test & measurement) equipment for data collection during development and research or on the production line and during daily use requires the use of commercial solutions that may be unattractive due to complexity, outdated design and high cost.

The EEZ Studio Instrument module now enables this for free and supports popular interfaces and technologies to access multiple devices from one place. Initiating data logging, collecting screenshots or measurement data from the instrument's memory buffer is possible in a few clicks. All data is stored in a database that is easy to search by various criteria. Navigation through the data is further facilitated by using a calendar ("heatmap"), scrapbook and sessions list. Import and export of collected data makes it easy to share data with colleagues and clients.

For user interaction with the instrument, a Terminal is available that supports shortcuts, searchable help commands, as well as launching scripts (SCPI command sequences, JS or MicroPython scripts).

Automate tests and measurements

Thanks to EEZ Flow programming, EEZ Studio enables the creation of complex applications for managing multiple devices using different interfaces for the needs of automation of testing and measurements in all phases from development, production to everyday use.

Now there is an attractive alternative for tasks that previously required the use of commercial solutions MATLAB®, Keysight® VEE, NI LabVIEW™ or programming in Python, C/C++, etc.
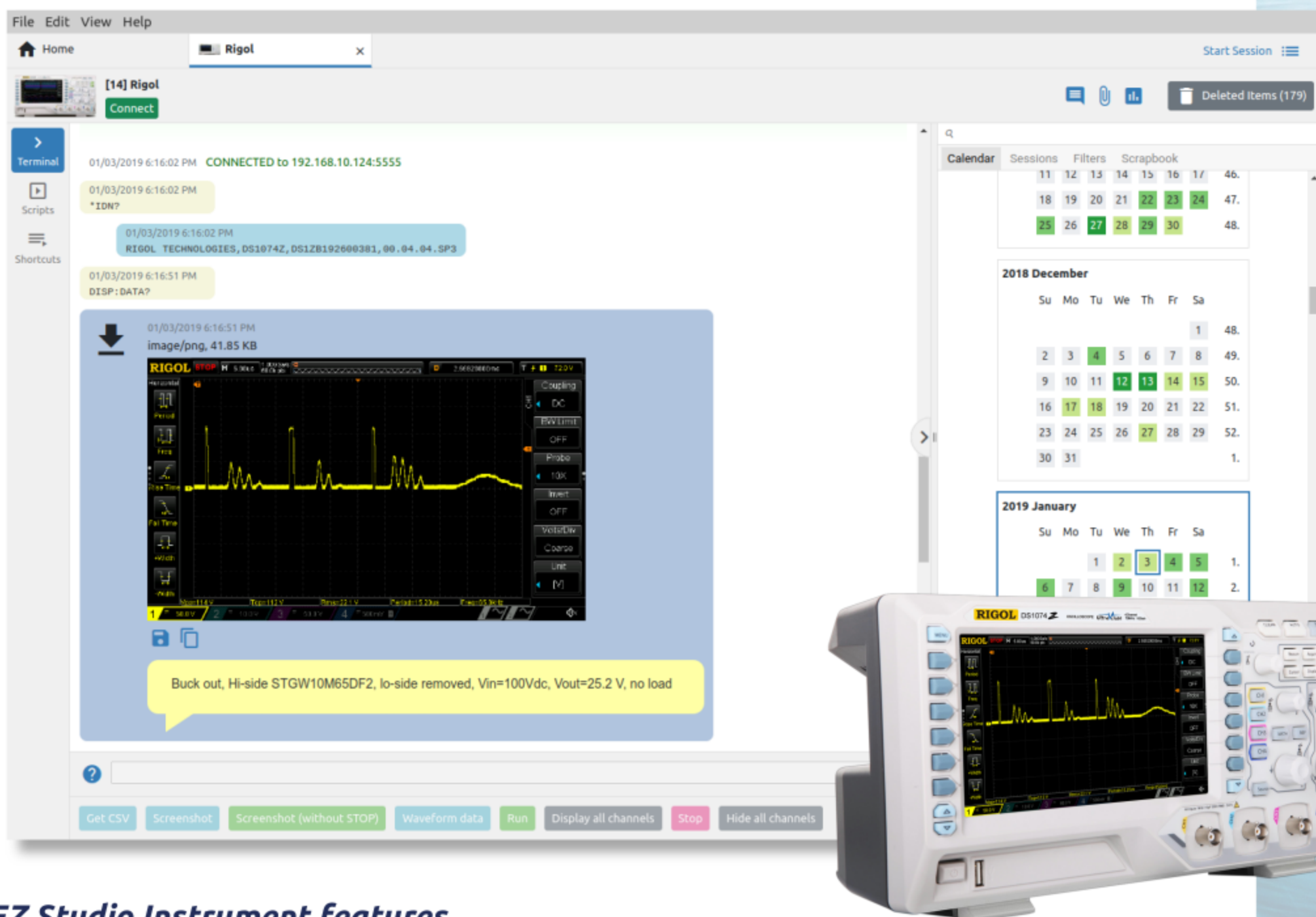
EEZ Studio Instrument features

– Serial, Ethernet, USBTMC and VISA interfaces
– Keysight® Offline Command Expert command sets
– Simple arbitrary waveform editor
– Displaying measurement data as graphs
– FFT analysis, harmonics and basic math functions
– Export graphs as .CSV file

– History with search/content filtering
– SCPI commands help with search
– Shortcuts (hotkeys and buttons)
– Javascript (JS) code for task automation
– IEXT (Instrument EXTension) catalog