

What is QuickHMI?

QuickHMI is a modern and reliable software for plant and machine visualization, as well as control instrument of automated industrial plants.

QuickHMI is based on modern web technologies such as **HTML5** and **JavaScript** and is well prepared for the requirements of **Industry 4.0** if desired, provision of the **HMI as a cloud application** is also easily possible.

With the scalable **QuickHMI** create small projects with a **Raspberry Pi** up to a large visualization of industrial landscapes.

General

- **Publisher:** Indi.An GmbH (Copyright ©)
- **System:** HTML5 application with client/server architecture
- **Current version:** 14 (Lynx)
- **Environment:** Runnable on 64-bit systems

License model without runtime licenses

Licensing via editor/developer > [NO RUNNING LICENSES](#) necessary.

Create your **QuickHMI** projects in any number and size. With the purchase of the **QuickHMI** system, you do not have to worry about further licensing the runtime environment.

Hardware system requirements

Generally, it should be either modern, commercially available computer hardware. The following list gives an overview of the recommended equipment:

QuickHMI-Editor

- **CPU:** Modern standard multi-core CPU with 64 bit, at least 1.6 GHz or higher
- **RAM:** at least 4 GB, recommended 8GB and higher
- **Network:** 1 Gbit/s recommended, Internet is required for installation, licensing and update transmission
- **Graphics:** 3D-capable graphics chip with hardware acceleration, DirectX 11 or OpenGL 3.3 recommended
- **Hard disk:** at least 3GB free memory

QuickHMI Standalone Runtime

- **CPU:** at least 1.6 GHz or higher with 64-bit
- **RAM:** at least 2 GB, recommended 4-8GB
- **Network:** 1 Gbit/s recommended
- **Raspberry Pi:** The execution of the software on the Raspberry Pi from version 4 is possible.
- **Hard disk:** at least 2GB free memory

QuickHMI Viewer or execution in the browser

- **CPU:** at least 1.6 GHz or higher with 64-bit
- **RAM:** at least 2 GB, recommended 4-8GB
- **Network:** 1 Gbit/s recommended
- **Graphics:** 3D-capable graphics chip with hardware acceleration, DirectX 11 or OpenGL 3.3 recommended
- **Raspberry Pi:** The execution of the software on the Raspberry Pi from version 4 is possible.

Operating systems

Editor

The **QuickHMI Editor** is executable under Windows from Windows 10 1607 or Windows Server from 2016 or higher.

The .Net framework 9.0 is required for execution. If this is not available, you will be informed of this during setup or it will be installed together with the editor.

Depending on the operating system, it may be necessary to activate the .Net framework 3.5. manually before installation under Windows. In this case, you will receive a corresponding message from Setup.

QuickHMI Standalone Runtime and QuickHMI Viewer

The **QuickHMI Standalone Runtime** and the **QuickHMI Viewer** work under Windows and Linux if the **Java OpenJRE 11** is supported by the operating system.

Furthermore, an **app for Android** is available in the Android Appstore, which can be executed from version 4.4 (**Kitkat**).

Java OpenJRE 11 or newer (from version 13, see next section) is required to run the **QuickHMI Standalone Runtime** and the **QuickHMI Viewer**.

Please note that the use of OpenJRE version 12 is only supported to a limited extent due to a faulty TLS1.3 implementation.

Browser (HTML5 enabled)

The system can be accessed from all operating systems that provide an HTML5-capable browser.

The following browsers have been tested and approved for compatibility with QuickHMI:

- **Chrome from version 54**
- **Mozilla Firefox from version 46**
- **Opera from version 41**

The use of other browsers may be possible to a limited extent, but is not recommended.

The browser should be installed in as new a version as possible and kept up to date.

Compatibility of PLC and other data sources

- **Siemens S7 controllers via PUT/Get access** (200, 300, 400, 1200, 1500, ET200SP series and SoftSPS WinAC RTX), **Logo!0BA7** and **Logo!0BA8** and CPU's of other manufacturers (eg VIPA 100V / 200V / 300V / 300S)
- **Siemens S7 controllers via symbolic access via Legacy access** (1200, 1500 and ET200SP series) *1
- **Siemens S7 controllers via symbolic access via TLS access** (1200, 1500 and ET200SP series) *2
- **OPC UA** interface
- **TWINCAT2** from version 2.1 and **TWINCAT3** is supported
- **MODBUS** TCP, RTU, RTU over TCP or ASCII
- **Allen-Bradley** "Control Logix", "Compact Logix" controls via Ethernet/IP protocol *3
- **BACnet** *4
- **KNX/EIB**
- **MQTT-Protocol**
- **SQL databases** using JDBC
- **Files from the file system** with the file system data source
- **Web service (URLEncoded, JSON and XML)**
- **InfluxDB**
- **Java universal data source** (create your own data source with the Java API)
- Native migration of additional protocols is planned.

*1 Legacy access must be enabled for the connection.

*2 Certain requirements must be met for symbolic access:

1. The controller software must have been created with at least TIA version 17.
2. If software components were created with an earlier version, they must be recompiled and transferred with TIA version 17 or higher. The same applies to the hardware configuration of the PLC.
3. At least the following firmware versions are required:
 - S7-1200 series with firmware versions V4.5, tested and released up to version 4.7
 - S7-1500 series from firmware version V2.9, tested and released up to version 4.0
 - S7-ET200SP series from firmware version V2.9, tested and released up to version 4.0

Note: When using the older legacy access for communication with a simulated controller, no password must be assigned. This restriction does not apply when using dedicated hardware controllers.

*3 ARM-based systems are not supported.

*4 BACnet IP4 Revision 19

Further functions at a glance

- Resource-saving server-client architecture
- Graphical operations are performed within the GPU of the graphics card, and relieve the computer CPU
- Central configuration tool for parameterizing the runtime environment
- SVG Control Manager (Visualization of own svg control elements)
- Creating variables in text view
- Real-time view of variable values
- Creation of faceplates (templates)
- Email functionality
- Database queries
- Status variables
- Integration of your own corporate design
- Responsive Design
- On-the-fly switching between design and runtime modes
- User and group management
- Parameterizable translation texts
- Integrated alarm reporting system
- Action, rule, recipe and resource management
- Integration of audio files
- Integration of own graphics
- AI support for creating SVG controls
- Zoom able masks and controls (Over 2000 graphics)
- Low administration effort due to central project location (The project does not have to be installed on clients, data is transferred from the server when connecting)
- Secure communication between server and clients due to SSL encryption
- QuickHMI Viewer is available as an open source project
- Infinite expansion capabilities by running custom HTML or JavaScript code (HTML and JavaScript manager)
- Display of trend data with the chart manager
- Easy to use step-by-step documentations
- AI help bot (AI-supported program help)
- "Ask the Chief" - Many integrated instruction videos can be called up directly from the program sections