

Web based HMI Tool: AEROPGLG019

The GLG Toolkit Web Edition by Generic Logic is a high-performance graphical framework designed to build and deploy web-based Human-Machine Interfaces (HMI) and SCADA systems. It allows developers to create dynamic, real-time process monitoring screens that run directly inside standard web and mobile browsers without requiring plugins.

Core Components

-  **GLG Graphics Builder:** A point-and-click graphical editor used to draw HMI dashboards, process loops, and system displays.
-  **JavaScript Library:** A client-side library that handles the rendering of vector graphics, processes real-time data animation, and manages user interaction via HTML5 Canvas.
-  **Framework Wrappers:** Native integration components explicitly built for web frameworks like **React**, **Angular**, and **Next.js**.
-  **GLG HMI Configurator:** A simplified end-user editing tool that allows clients or operators to tweak screens using ready-made components without changing source code.
-  **Key Features & Technology Stack**
-  **Resolution-Independent Graphics:** All layouts are vector-based, making them responsive and scalable across massive control room monitors down to smartphones.
-  **Low-Latency Rendering:** Uses pure client-side HTML5 execution capable of animating charts and telemetry data with tens of thousands of data points seamlessly.
-  **Cross-Platform Reusability:** Designs crafted in the **Graphics Builder** can be used across web platforms as well as desktop setups like C/C++, Java, and C#/.NET.
-  **GIS Map Component:** Features a self-contained GLG Map Server that handles geographic maps locally without needing an active internet connection.
-  **Flexible Backend Data API:** Connects natively to any backend data acquisition protocol, SCADA network, or custom database.
-  **Deployment Architecture**

The toolkit supports two distinct web topologies:

1. **Client-Side (HTML5/JavaScript):** The graphics engine and application logic run inside the user's browser, pulling data directly via WebSockets or AJAX.

2. **Server-Side Rendering:** Uses an ASP.NET or JSP Graphics Server to process high-intensity map and logic steps on the host server before sending outputs to thin clients. If you would like to explore this tool further, please let me know:

-  What **backend system** or **data protocol** (e.g., MQTT, OPC UA, Modbus) are you trying to link to your HMI?
-  Which **frontend framework** (e.g., React, Angular, Vanilla JS) are you using to develop your web application?
-  Do you require specialized components like **real-time charting** or **GIS map**
-  Are you looking to implement the SCADA Viewer on a **desktop framework** or a **web application**? Let me know your development platform, and I can guide you through the setup.

The **Web Edition of the GLG Toolkit** by Generic Logic is a specialized graphical framework designed to build and deploy high-performance, real-time **Human-Machine Interfaces (HMI)** and SCADA dashboards directly in web browsers and mobile devices. Unlike rigid "black box" HMI tools, it offers a developer-focused, open framework that handles massive, rapid data updates with low latency.

Core Architecture & Workflow

1. **Design (GLG Graphics Builder):** You create your dynamic HMI screens, vector graphics, process control mimics, and diagrams using a point-and-click Graphics Builder. This eliminates manual coding for the visual elements.
2. **Deploy (GLG JavaScript Library):** The screens are saved as resolution-independent vector drawings. They are deployed on the web using a pure JavaScript library that renders graphics via HTML5 canvas, supporting all major desktop and mobile browsers without requiring local installations.

Technical Capabilities Matrix

Feature	Description / Supported Technologies
Web Tech Stack	Native JavaScript, React, Angular, Next.js framework components.
Backend Integration	Open Data API allows connecting animations and elements to any backend data acquisition system.

Server-Side Options	Supports alternative server-side web deployment via ASP.NET or JSP Graphics Servers.
Cross-Platform Reuse	The exact same drawing file created in the builder can be reused across Web, Mobile, C/C++, Java, and C#/.NET desktop environments.
Pre-built Components	Palettes for dials, meters, real-time charts (handling tens of thousands of points), process control symbols, and an optional GIS Map component.

Key Strengths

-  **High Performance:** It replicates the rapid update speeds and complex user interactions traditionally restricted to native desktop applications, making it suitable for mission-critical industrial monitoring.
-  **Total Control:** It provides developers with complete creative flexibility to build custom HMI elements with complex internal logics and behaviors, rather than relying strictly on "canned" vendor components.
-  **Cross-Platform Consistency:** You can use the Generic Logic Multi-Platform Toolkit to build an interface once and deploy it across Windows, Linux, embedded ARM boards, and web browsers simultaneously.

To help tailor this information, what specific **industrial application** or **backend tech stack** (e.g., MQTT, WebSockets, REST APIs) are you planning to integrate with the GLG Toolkit?

OS & HARDWARE SUPPORT	INDUSTRY APPLICATION

Note: ** Specifications are copied from manufacturer data. Please contact before buying.