

Control and HMI Tools: AEROPGLG012

The **GLG Toolkit** (Generic Logic Graphics Toolkit) is a software framework for building cross-platform, data-driven HMI and SCADA displays. It provides a visual **Graphics Builder** and multi-language libraries (C/C++, C#, Java, JavaScript/React/Angular) used by industries like NASA and Collins Aerospace to create low-latency telemetry, process control, and network monitoring applications.

Key Features and Components

- **Point-and-Click HMI Editor:** Allows developers to design custom dynamic dashboards, dials, and charts without manual coding.
- **Cross-Platform Deployments:** Create once, and deploy across web (HTML5/Canvas), desktop (Windows, Linux, Unix), and mobile devices.
- **Framework Support:** Includes native components for modern web stacks like **React, Angular, and Next.js**.
- **Real-Time Data Integration:** Features high-performance monitoring for tens of thousands of data points, as well as an optional GIS map component.
- **OEM Customization:** Provides an HMI Configurator designed to let end-users securely tweak HMI screens.

Target Industries and Use Cases

- SCADA / HMI mimic diagrams
- Telemetry and network monitoring
- Traffic control and aerospace operations
- Industrial process monitoring

If you want, let me know:

- Your **programming environment** (C#, Java, or Web/JavaScript)
- What **specific devices or systems** you are looking to monitor
- If you need to evaluate the software by downloading the **Community Edition**

I can provide more specific tutorials or integration steps to help you get started.

The **GLG Toolkit** by Generic Logic is a high-performance, cross-platform graphical development framework used to build **Human-Machine Interfaces (HMI)**, **SCADA**

systems, and real-time data visualization dashboards. It allows developers to design dynamic, data-driven vector graphics without manual coding, deploying them seamlessly across desktop, web, and mobile environments.

Key Components

- **GLG Graphics Builder:** A point-and-click interactive HMI editor used to draw vector-based control screens, define dynamic animations, and map objects to real-time data tags.
 - **Pre-Built Widget Palettes:** A massive library of ready-to-use industrial components including **dials, meters, charts, sliders, toggles**, and process control symbols.
 - **GLG HMI Configurator:** A simplified version of the editor that can be packaged into an application so **end-users can customize** their own dashboards without modifying code.
 - **GIS Map Component:** An optional extension providing a **self-contained map server** that renders local geographic data in real time without needing an active internet connection.
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Multi-Platform & Language Support

The toolkit bypasses rigid "black box" HMI limitations by serving as an open graphical framework integrated via a powerful programming API:

Edition / Environment	Supported Tech Stack & Features
Web & Mobile Edition	Employs HTML5 canvas through a native JavaScript library . Native wrappers are provided for React, Angular, and Next.js.
Desktop .NET Edition	Includes a C# User Control and a managed class library for Windows Forms.
Cross-Platform Java	Cross-platform deployment via a dedicated Java Class Library.
Native C / C++	High-performance C/C++ libraries and DLLs tailored for Linux, Unix, Windows , and real-time operating systems (RTOS).

Server-Side Web

Uses an **ASP.NET or JSP Graphics Server** to display dynamically updating images for legacy system migrations.

- Core Strengths
- **High Performance:** Specifically optimized for low-latency telemetry, making it capable of handling charts with **tens of thousands of data points** updating concurrently.
 - **Resolution Independent:** Built using scalable vector graphics, meaning a single screen design effortlessly adapts from a massive industrial control room monitor down to a smartphone.
 - **Write Once, Deploy Anywhere:** Layout files (.g drawings) created in the Graphics Builder can be loaded interchangeably by the C++, C#, Java, or JavaScript runtimes without modification.
 - **Mission Critical Reliability:** Extensively trusted across highly demanding sectors by industry leaders such as **NASA, the FAA, Collins Aerospace, BAE Systems, and Yokogawa.**

If you are currently evaluating this for a project, tell me:

- What **programming language** or **web framework** is your backend/frontend using?
- What **type of data source** (e.g., MQTT, OPC UA, Web Sockets) will drive the graphics?
- Are you looking for a **free community edition** or commercial deployment options?

I can provide tailored integration steps or code snippets based on your setup.

OS & HARDWARE SUPPORT	INDUSTRY APPLICATION

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