

Data Acquisition Software Tool: AEROPGLG06

The **GLG Toolkit** (Generic Logic) is a cross-platform HMI and SCADA software tool designed for building customizable, data-driven visuals, dynamic dashboards, and process control systems. It is highly versatile, operating seamlessly across Web, Desktop, and Embedded systems without requiring raw manual coding.

Key Features

- **Interactive HMI Editor:** Features the GLG Graphics Builder, a point-and-click graphical editor used to design dynamic screens, define behavior, and attach data sources.
- **Data-Agnostic API:** Connects to any backend data acquisition system using an Open Data API and the GLG Data Gateway for secure, real-time telemetry streaming.
- **Platform & Language Support:** Provides native libraries for JavaScript/HTML5 (React, Angular, Next.js), C/C++, C# (.NET), and Java.
- **Real-Time Monitoring:** Handles high-performance charts, plotting tens of thousands of data points.
- **Optional GIS Mapping:** Self-contained map server for GIS integration that operates offline without the internet.

It is widely used across mission-critical industries, including aerospace (NASA, Collins Aerospace), manufacturing, and SCADA process control.

Getting Started

You can test the software by downloading the fully functional **Free Community Edition**, which includes the Graphics Builder, example frameworks, and integration code.

- **Download Page:** Get the installer and choose your environment on the GLG Toolkit Download Page.

- **Technical Details:** Explore complete cross-platform capabilities on the GLG Toolkit Main Page.
- If you would like to proceed, could you tell me:
- What **framework or programming language** (e.g., JavaScript/React, C#, Java) you are planning to integrate this with?
- What **specific type of hardware or data source** (e.g., PLCs, telemetry, databases) you are trying to connect?

I can provide more tailored examples and integration workflows!

The **GLG Toolkit** by Generic Logic is a high-performance graphical development framework used to build Human-Machine Interfaces (HMI), SCADA systems, and real-time data visualization dashboards. It functions as a data-agnostic visualization layer, meaning it does not collect raw data itself but connects to any backend data acquisition system, Programmable Logic Controller (PLC), or database via its **Open Data API** and **GLG Data Gateway**.

Core Components

- **GLG Graphics Builder:** An interactive, point-and-click editor used to design vector-based HMI screens and process mimics without manual coding.
- **GLG Data Gateway:** A low-latency middleware library (built on ZeroMQ) that bridges the gap between hardware telemetry and the visual interface, ensuring smooth data distribution.
- **HMI Configurator:** A simplified version of the editor designed for end-users to tweak dashboards and reassign data tags without breaking application logic.
- **Pre-built Widgets:** A comprehensive library of real-time charts, 2D/3D graphs, dials, meters, avionics gauges, and status toggles.

Key Features & Capabilities

- **Data Agnostic Architecture:** Seamlessly binds live data streams to graphical components using resource or tag-based data access.

- **High Performance:** Optimized for real-time monitoring, capable of handling charts updating tens of thousands of data points with low CPU overhead.
- **GIS Map Server:** A self-contained, high-performance map server component that operates entirely offline for localized tracking and geographic visualization.
- **Resolution Independence:** Uses scalable vector graphics (SVG/vector framework) so that the exact same dashboard template scales across small embedded screens, desktop monitors, and mobile phones.

Cross-Platform & Deployment Options

The toolkit allows developers to design an interface once in the Graphics Builder and deploy it across nearly any modern operating system or runtime environment.

Deployment Environment	Supported Technologies & Libraries	Target Platforms
Web & Mobile	JavaScript, React, Angular, Next.js, AJAX Graphics Server	Web Browsers, iOS, Android
Desktop Software	C/C++, C#/.NET (Windows Forms / ActiveX), Java	Windows XP to 11, Linux, Unix
Embedded Systems	Native C/C++ cross-compilation, ARM binaries	Raspberry Pi, BeagleBone, TI Sitara boards

Common Industry Applications

- **Industrial Automation:** Creating monitoring systems for manufacturing lines, chemical plants, and rubber processing mixers.
- **Energy & Utilities:** Building control room displays for wind turbine outputs, power grids, and water treatment systems.
- **Telemetry & Network Management:** Visualizing massive network infrastructure traffic, avionics data, or moving vehicle fleets.

Are you looking to use the GLG Toolkit for a **web-based project** or a **desktop/embedded application**? Let me know your specific **programming language** or **hardware setup** so I can guide you on getting started with their Free Community Edition.

OS & HARDWARE SUPPORT	INDUSTRY APPLICATION

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