

Machinery Plant control Software : AEROPGLG09

The GLG Toolkit by Generic Logic is a flexible graphical framework for building custom HMI (Human-Machine Interface) and SCADA systems for machinery plants and process control. It allows developers to create data-driven visuals and connect them to real-time machinery data.

Key features and implementation details include:

- **Interactive HMI Editor:** Features a point-and-click Graphics Builder to design dynamic process displays without extensive manual coding.
- **Platform Flexibility:** Cross-platform support includes native libraries for C/C++, C#/.NET, Java, and a JavaScript/React library for web and mobile web-browser deployment.
- **Real-Time Data Access:** Uses an Open Data API so that your graphics are data-agnostic and easily connected to existing PLCs, IoT devices, or data acquisition systems.
- **Specialized Components:** Includes built-in objects for alarm management, GIS mapping, and high-performance charts for telemetry and monitoring.
- **Community Edition:** Offers a Free Community Edition for testing and personal development before purchasing commercial runtimes.

Could you tell me a bit more about your project? For example:

- Are you looking to integrate this into a new application or upgrade an existing one?
- What framework or language (e.g., C#, Java, React) are you using to communicate with your machinery?

I can then help provide more specific documentation or setup examples.

The **GLG Toolkit by Generic Logic** is an advanced cross-platform graphical framework engineered specifically for building real-time Human-Machine Interfaces (HMI), SCADA systems, and dynamic industrial plant process control displays.

Instead of forcing developers to use standard, rigid UI widgets, the toolkit allows engineers to build highly customized, pixel-perfect visual elements that link directly to machinery data streams.

Core Architecture & Integration

- **Interactive Graphics Builder:** Developers use a point-and-click graphical editor to draw and animate custom vector graphics without writing low-level drawing code.
- **Open Data API:** Decouples the visual layer from the data source, allowing you to feed real-time machinery telemetry directly into your graphics from any proprietary or vendor-neutral PLC, database, or backend network.
- **Multi-Language Support:** The same visual assets can be cross-deployed across C/C++, C#/.NET, Java, or modern Web/Mobile applications utilizing HTML5 JavaScript, React, Angular, and Next.js.

Real-World Machinery Control Capabilities

The toolkit is optimized for high-performance and mission-critical enterprise deployments. For example, the software has been deployed by defense contractor L3Harris to manage the **Machinery Plant Control and Monitoring System (MPCMS)** onboard U.S. Coast Guard Juniper-Class Buoy Tenders.

The system maps heavy-duty industrial systems directly to interactive operator dashboards:

- **System Controls:** Point-and-click control over propulsion, auxiliary machinery, and local plant infrastructure.
- **Telemetry Feeds:** Real-time dials, gauges, and tank level indicators.
- **Telemetry Handling:** High-frequency charts capable of displaying tens of thousands of active points simultaneously.
- **Alarm Systems:** Instant visual alarming, custom data logging configurations, and acknowledgement interfaces.
- **Offline GIS Mapping:** Includes an integrated map server that handles physical plant mapping and geographic coordination entirely offline without needing an active internet connection.

Licensing Options

- **Commercial Edition:** Fully supported enterprise package tailored for defense, aviation, and heavy manufacturing companies.
- **Community Edition:** A free development version that includes the GLG Graphics Builder, widget sets, and cross-platform libraries, widely used for independent projects like Raspberry Pi builds and equipment simulators.

Are you looking to use the GLG Toolkit for a **desktop app** or a **web-based HMI dashboard**? If you share your **specific backend data environment** (e.g., OPC UA, Modbus, MQTT), I can outline the data binding steps.

OS & HARDWARE SUPPORT	INDUSTRY APPLICATION

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