



INDUSTRIAL AUTOMATION SUITE

**Empowering Your Industry with Innovative
Automation Solutions**



Compact PLC - HMI



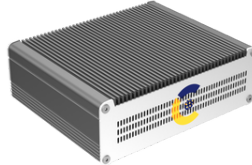
Compact PLC -Wifi



Modular PLC



**Factory Intelligence
Appliance**



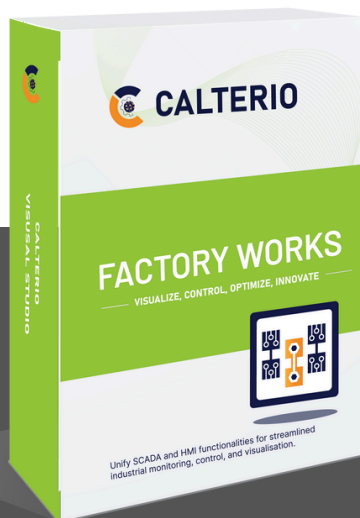
**Factory Works
Appliance**



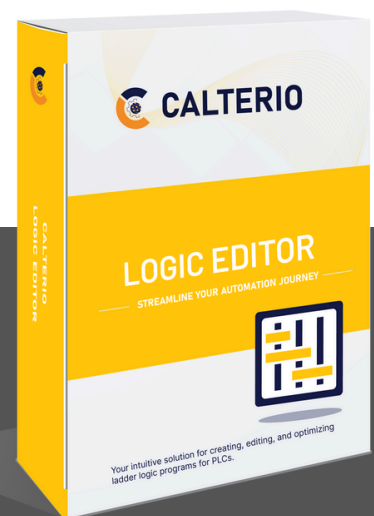
**Namespace
Appliance**



**Semantic
Modeller**



Factory Works



Logic Editor



contact@calterio.com



calterio.com

Overview

Welcome to Calterio Logic, where cutting-edge technology meets industrial excellence. Explore our comprehensive range of PLCs, Industrial Automation Suite, and Industrial Appliances to transform your manufacturing operations.

PLC Range

Compact PLC - WiFi: A compact and versatile PLC solution with built-in WiFi connectivity, ideal for remote monitoring and control applications.

Compact PLC - HMI: A compact PLC with integrated HMI (Human-Machine Interface) for intuitive operation and enhanced user experience.

Modular PLC: A modular PLC system offering scalability and flexibility to meet diverse automation needs.

Industrial Automation Suite

Logic Editor: Intuitive software for creating, editing, and optimizing ladder logic programs for PLCs, ensuring seamless automation control.

Semantic Modeller: Visual programming tool for designing and deploying complex industrial automation workflows, ISA-95 hierarchies, Spark Plug B Specifications and with a flow programming paradigm.

Factory work: Comprehensive SCADA (Supervisory Control and Data Acquisition) and HMI solution for industrial monitoring, control, and visualization.

Industrial Appliances

Factory Works Appliance: All-in-one appliance for SCADA applications, providing real-time data acquisition, visualization, and control capabilities.

Namespace Appliance: Dedicated appliance for Unified Namespace implementation, enabling streamlined data management and integration across industrial systems.

Factory Intelligence Appliance: Advanced analytics appliance for extracting actionable insights from manufacturing data, optimizing processes, and driving operational efficiency.





CALTERIO

Calterio Compact PLC



The Compact PLC - WiFi offers compact design, robust performance, and built-in WiFi connectivity, making it an ideal solution for remote monitoring and control applications in industrial environments. With its advanced features and intuitive interface, it enables seamless integration into existing automation systems, empowering businesses to optimize operations and maximize efficiency.

Contact

 contact@calterio.com

 www.calterio.com

✓ Key Features

- 8 Digital Inputs for versatile connectivity.
- 6 Relay Outputs for precise control.
- RS-485 Communication for seamless data exchange.
- Power Supply Range: 12V to 24V for flexibility in installation.

✓ Benefits

- **Reliable Performance:** Industrial-grade components ensure robust operation.
- **Cost-Effective:** Streamlined design reduces unnecessary features for cost savings.



CALTERIO

Calterio Compact PLC - HMI



The Calterio Compact PLC with HMI (Display) combines robust functionality with intuitive user interface for efficient industrial automation. With its compact design and versatile features, it's an ideal solution for a wide range of applications.



Key Features

- 8 Digital Inputs
- 6 Relay Outputs
- RS-485 Communication
- Built-in 0.96 OLED Display
- Analog Inputs: 6 (4-20mA / 0-10V, 16-bit resolution)
- DIN-rail Mounting Compatible
- Industrial-grade Reliability



Benefits

- Compact Design for Space Efficiency
- Versatile Input and Output Options
- Enhanced Communication Capabilities

Contact



contact@calterio.com



www.calterio.com



CALTERIO

Calterio Modular PLC

The Modular PLC provides exceptional scalability and flexibility, enabling businesses to customize automation solutions to their specific needs. Its modular design allows easy expansion and adaptation, while robust performance ensures reliable operation in demanding industrial environments. Seamless integration and advanced features empower businesses to optimize processes and enhance productivity.

Contact



contact@calterio.com



www.calterio.com



Key Features

- 8 Digital Inputs
- 6 Relay Outputs
- RS-232 or RS-485
- Ethernet and CAN
- Analog Inputs: 6 (4-20mA / 0-10V, 16-bit resolution)
- DIN-rail Mounting Compatible
- Industrial-grade Reliability



Benefits

- Compact Design for Space Efficiency
- Versatile Input and Output Options
- Enhanced Communication Capabilities



Calterio SEMANTIC MODELLER

is a visual programming tool based on Node-RED, enabling intuitive workflow design for industrial automation tasks.

Calterio Sematic Modeller is a visual programming tool based on Node-RED, facilitating intuitive workflow design for industrial automation tasks. It simplifies data flow management and configuration based on user requirements, utilizing the ISA-95 structure for streamlined integration.

Contact

 contact@calterio.com

 www.calterio.com



Key Features and Capabilities

- Lookup Editor for PLC and SCADA data flow integration.
- Tag-based configuration based on ISA-95 structure.
- Real-time monitoring and debugging capabilities.



Benefits

- Seamless integration with PLC and SCADA systems.
- Standardized data handling with ISA-95 structure.
- Enhanced visualization and analytics capabilities.



CALTERIO

Calterio Logic Editor

is a powerful tool for PLC logic editing and IoT code generation. It seamlessly integrates with MQTT protocols, enabling real-time interaction with program variables.

The Logic Editor generates Arduino code (.ino) for ESP32 devices, facilitating seamless integration with hardware. Its intuitive interface, simulation tools, and customization options make it a preferred choice for efficient logic programming.

Contact

 contact@calterio.com

 www.calterio.com



Key Features and Capabilities

- Intuitive ladder logic editor interface.
- MQTT protocol integration for real-time data exchange



Benefits

- Streamlined PLC logic editing and IoT code generation.
- Real-time interaction with program variables via MQTT.



CALTERIO

Calterio Factory work

is serves as the cornerstone of the suite, providing a comprehensive solution for SCADA and HMI functionalities.

It integrates seamlessly with standard IT tools and databases like MongoDB, PostgreSQL/TimescaleDB, Node.js, C#, Golang, and visualization tools like Grafana. With Calterio Visual Studio, operators gain real-time control, monitoring, and visualization capabilities, ensuring optimal performance and decision-making.

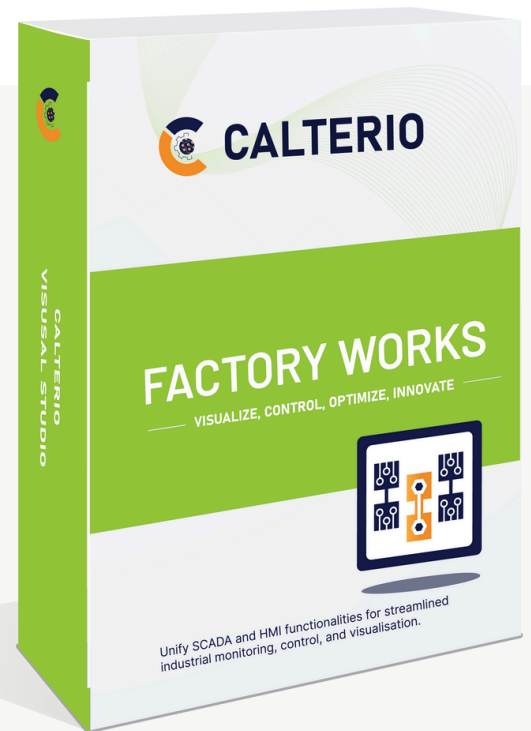
Contact



contact@calterio.com



www.calterio.com



Key Features and Capabilities

- Role-based access control and protocol drivers.
- SVG synoptic display editor.
- Real-time core database and historian functionalities.



Benefits

- Comprehensive SCADA and HMI functionalities.
- Real-time data processing and visualization.



CALTERIO

Industrial Appliances Range



**Factory Intelligence
Appliance**

Welcome to Calterio's Industrial Appliances Range, where innovation meets efficiency. Our range of industrial appliances is designed to enhance operational excellence, streamline processes, and maximize productivity in industrial settings.



**SCADA
Appliance**



**Namespace
Appliance**

 contact@calterio.com

 www.calterio.com



CALTERIO

Industrial SCADA Appliance



The SCADA Appliance is a turnkey solution for supervisory control and data acquisition (SCADA) applications. It provides real-time monitoring, control, and visualization capabilities, allowing operators to oversee industrial processes with ease.

✓ Key Features and Capabilities

- Pre-configured SCADA software for rapid deployment.
- Centralized data acquisition and visualization.
- Support for various industrial protocols.
- Role-based access control for enhanced security.

✓ Hardware specification

- Windows 10 (x86-64 bits), 8GB+ RAM.
- Linux ARM 64 bits.
- Admin privileges.
- Windows PowerShell.
- DotNet Core 5.0.x x64 Runtime.
- Open SSL 1.1.1m binaries for 64-bit Windows

 contact@calterio.com

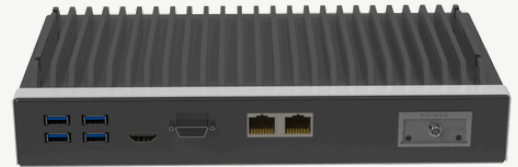
 www.calterio.com



CALTERIO

Industrial Namespace Appliance

The Namespace Appliance is a powerful tool for managing industrial data and ensuring consistency across systems. It provides a unified namespace for data modeling, storage, and retrieval, enabling seamless integration and interoperability.



✓ Key Features and Capabilities

- Centralized data management with a unified namespace.
- Support for standard industrial data models.
- Integration with PLCs, SCADA systems, and IoT devices.
- Real-time data synchronization and replication.

✓ Hardware specification

- Windows 10 (x86-64 bits). or Linux ARM 64 bits
- CPU - 4 Core, GPU - 16 GB VRAM .
- Memory : 16 GB.
- Storage SSD - 256GB

Factory Intelligence Appliance

The Factory Intelligence Appliance is an advanced analytics platform for extracting actionable insights from industrial data. It leverages machine learning algorithms and predictive analytics to optimize processes, reduce downtime, and improve efficiency.



✓ Key Features and Capabilities

- Centralized data management with a unified namespace.
- Support for standard industrial data models.
- Integration with PLCs, SCADA systems, and IoT devices.
- Real-time data synchronization and replication.

✓ Hardware specification

- Windows 10 (64 bits).
- Linux ARM 64 bits.
- Memory : 16 GB. Storage - 256GB
- CPU - 4 Core, GPU - 16 GB VRAM



contact@calterio.com



www.calterio.com



CALTERIO

Why Choose Calterio?

Turnkey Solutions: Our appliances are pre-configured and ready to deploy, minimizing setup time and simplifying implementation.

Scalability: Designed to scale with your operations, our appliances can accommodate the growing needs of your business, ensuring flexibility and adaptability.

Interoperability: With support for standard industrial protocols and data models, our appliances seamlessly integrate with existing systems, enabling interoperability and data exchange.

Advanced Analytics: Our Factory Intelligence Appliance offers advanced analytics capabilities, allowing you to unlock valuable insights from your industrial data and drive informed decision-making.

Reliability: Built with robustness and reliability in mind, our appliances deliver consistent performance in even the most demanding industrial environments.



contact@calterio.com



www.calterio.com

Key Features & Benefits

- **Superior Operational Context:** Calterio provides a comprehensive and intuitive operational context, enabling operators to gain deep insights and make informed decisions swiftly.
- **Streamlined Control:** The suite consolidates and simplifies control processes, reducing complexity and enhancing operational efficiency.
- **Empowering Operators:** Operators are empowered to optimize current operations while actively contributing to the design and realization of future advancements.
- **Advanced Functionality:** Built-in functionalities offer advanced capabilities for data acquisition, monitoring, analysis, and visualization, ensuring a robust and reliable automation solution.
- **User-Friendly Interface:** Calterio features a user-friendly interface that facilitates ease of use, navigation, and customization according to specific industrial requirements.
- **Scalability:** The suite is designed for scalability, accommodating the evolving needs of industrial processes, from small-scale operations to large-scale industrial environments.
- **Future-Ready:** Calterio is future-ready, incorporating cutting-edge technologies and standards to meet the challenges and opportunities of Industry 4.0 and beyond.

✓ Development Environment

- Create and edit visualization projects.

✓ Runtime Software

- Run projects on end-user computers.

✓ Thin Clients

- View visualizations on web browsers, tablets, and smartphones.

✓ Communication Drivers

- Transfer data from hardware devices to runtime software.



Highly Appreciated Features

- Advanced SCADA and HMI functions for effective control and visualization.
- Seamless integration with IT tools and databases.
- Extensive equipment library and customizable dashboards.
- Robust communication capabilities with MQTT integration and secure data transmission.

Range of Use

- Suitable for various industrial scales and adaptable to changing needs.
- Customizable workflows and support for multiple protocols.
- Wide application in manufacturing, energy, transportation, building automation, healthcare, agriculture, and environmental monitoring.

Fields of Use

- Manufacturing and production processes.
- Energy and utilities management.
- Transportation and logistics.
- Building automation and smart infrastructure.
- Healthcare and pharmaceutical industries.
- Agriculture and environmental monitoring.

Range of Use

Calterio Industrial Automation Suite is a versatile solution designed to address a wide range of industrial automation needs across various sectors. Its applications span from small-scale installations to large-scale deployments

About us

Founded with a vision to revolutionize industrial automation, Calterio is a dynamic and forward-thinking company dedicated to driving innovation, efficiency, and excellence across industries. With years of experience and a passion for technology, we have established ourselves as a trusted partner for businesses seeking to optimize their operations and unlock new possibilities in the digital age.

