CONTROLEDGE PLC
BETTER CONTROL GIVES YOU AN EDGE

Honeywell

POWER

STATUS

CONTROLLER
900CP1-0100

RUN/PGM
PGM   RUN
RUN/PGM

UIO

UIO

Honeywell

NEW GENERATION CONTROLLER

Honeywell's PLC is part of the ControlEdge™ family, a next-generation family of controllers providing unprecedented connectivity through all levels of process and business operations. The result is optimized operations and maintenance efficiencies that liberate personnel from manual processes. ControlEdge PLC is one of our first controllers supporting Honeywell's IIoT-ready initiative.

ControlEdge PLC dramatically reduces configuration, integration, and support costs while decreasing risk with the best cybersecurity on the market. Honeywell is the first to provide a complete ecosystem including PLC, SCADA, and DCS together. Combined with Experion®, ControlEdge PLC minimizes downtime through unified support, and lowers total cost of ownership through extended system lifecycle and the best investment protection on the market. Experion and ControlEdge PLC leverage a common HMI platform, provide faster field device commissioning, and improve device diagnostics.

Built-in OPC UA, EtherNet/IP, DNP3, Profinet protocol and cybersecurity provide smooth integration to a range of instruments, equipment and software from multiple vendors. The first PLC to offer HART-enabled Universal I/O offers remote configuration, late design change flexibility, and simulation for improved project implementation and training.

HOW IS CONTROLEDGE PLC DIFFERENT?

Experion Integration

Honeywell can serve as your single vendor for all automation needs, including the DCS, PLC, SCADA, Field Device Manager for asset management, and a Panel PC - all with seamless integration, configuration, and support. Coordination is easier with fewer teams and direct access to system knowledge, and auto-configuration of PLC data points in Experion Server means easy updates and faster project deployment. A single point of responsibility reduces both risk and cost with fewer coordination errors, less engineering, faster installation, less training and reduced hardware.

Field Device Manager (FDM) provides fast and accurate commissioning of field devices and simplified diagnostics, resulting in fewer site trips. Combining FDM with the HART IP open standard offers design flexibility and protection of existing site investments. HART command function blocks in the PLC support improved plant operation and device diagnostics, along with reduced commissioning and installation cost.

Operator effectiveness is increased with a common HMI across system applications. An integrated solution provides pre-built diagnostics, an integrated alarm summary, and history, trending and reporting on a single Experion infrastructure with native peer-to-peer integration to Experion Controllers. Results are fewer operator and engineering stations, less hardware and wiring, reduced IT licensing and training, fewer errors, and increased efficiency and availability. You benefit from reduced cost over the lifecycle with smaller footprint and easier maintenance. The Experion PPC (Panel PC), provides a touch user interface and consistent HMI for an operator either in the field or in the control room. Consistent interface alarms, trends, diagnostics and history results in better response and plant uptime.

EtherNet/IP

Experion Integration

- Standardization of solution
- Leaner control room
- Reduced lifecycle maintenance

Universal I/O – Lean Project Execution

- Spares reduction
- Less infrastructure
- Accommodate late design changes
- Improve project schedule, cost, and risk
- Remote configuration

OPC UA, Ethernet/IP, Profinet, and DNP3 (with Multimaster)

- Open communications protocol
- Smooth device integration
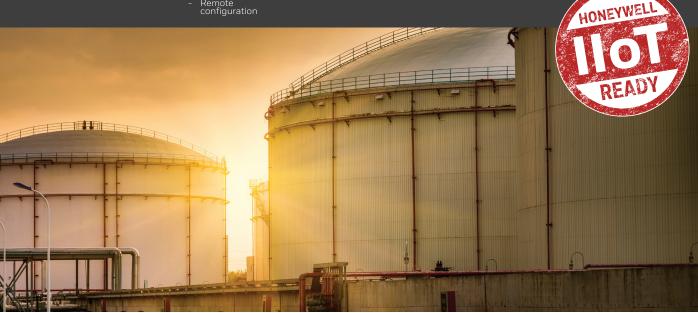- Easy configuration

Fully Integrated Cybersecurity

- Security built-in to PLC and Experion
- ISASecure EDSA Level 2 certification
- Preserve safety and availability with managed services

Lifecycle Investment Protection

- Equipment integration
- Upgrades
- Migrations

Lean Project Execution and Universal I/O

Honeywell's lean project execution solution provides several enhancements to the PLC.

ControlEdge PLC offers a variety of I/O choices for flexibility and reduced system cost. HART-enabled Universal I/O means no additional costly hardware to support HART. The first PLC to offer Universal I/O provides remote configuration and design change flexibility for improved project implementation and reduced cost and risk. Engineers can quickly accommodate late configuration changes remotely with a simple software configuration change.

ControlEdge PLC offers simulation software to support engineering, training, and testing without requiring hardware.

Built-in Protocols

Built on a proven and capable platform, ControlEdge PLC provides an IIoT-ready system that enables users to better leverage data across their assets. Use of the OPC UA, Profinet, and EtherNet/IP

protocols offers smooth integration to a broad range of instruments. Embedded OPC UA enables interoperable multi-level and multi-platform open communication for flexible and scalable design, facilitating standardization with less hardware. An IIoT-ready platform enables more direct access to cloud-based applications for visualization and analytics reducing additional gateway cost and allowing easier maintenance.

Built-in EtherNet/IP and Profinet enable integration with a wide range of industrial equipments such as I/O modules, drives, devices, and controllers supporting these protocols. In addition, Modbus RTU, Modbus ASCII, and User Defined Protocols are also natively supported. Engineers get a wide range of design choices, be it for topology, vendor, specifications or connection media, to deliver a solution to fit application requirements. Standard data models for accessing the process and device information significantly improve information available for controls and diagnostics.

ControlEdge PLC provides full support of DNP3 protocol for remote

applications. With the event buffer feature, DNP3 protocol stores data in a flash or SD card when the communication with SCADA is lost, and the events are received in the SCADA server when the communication is restored. The ControlEdge PLC DNP3 multi-master capability allows simultaneous data collection from multiple SCADA masters.

ControlEdge PLC supports a library of custom function blocks for MDIS communication.

MDIS combined with ControlEdge PLC and Experion Server UA Client architecture provides a tightly integrated Experion solution for Subsea application, reducing engineering costs.

Built-in Cybersecurity

Our embedded cybersecurity supports compliance, reduced risk, and availability. ControlEdge is the first PLC to be certified ISASecure EDSA Level 2. Features include secure boot to prevent uploading of unauthorized software, a built-in firewall to reduce exposure to denial-of-service attacks and message flooding, and a certified

secure development lifecycle to ensure security is built-in from the start. PLC communication is protected using IPSec to prevent man-in-the-middle attacks and unauthorized access. ControlEdge PLC supports encryption, easy configuration, and certificate-based authentication.

In addition, Honeywell offers world-class Industrial Cybersecurity Solutions and Managed Services that help protect the availability, safety and reliability of industrial control systems and site operations.

HONEYWELL'S SOLUTION REDUCES COST AND UNPLANNED DOWNTIME

Reducing time for commissioning and minimizing troubleshooting allows early startup. In addition, there is reduced unplanned downtime associated with the ability to remotely diagnose equipment.

Why Choose Honeywell?

Choosing Honeywell provides distinct support advantages as well as access to our broad portfolio. Honeywell helps customers cost-effectively manage their control and safety infrastructure in the face of constantly evolving technology with extended lifecycle support, flexible and easy migration paths, and virtualized upgrade capabilities.

Lifecycle Investment Protection

Honeywell has continually guarded customer investments by providing easy upgrade paths to the latest control system technology. Honeywell continues to evolve and innovate to bring significant advances in automation technology, while also providing a smooth migration path to today's technology when the time is right for you. We have a wealth of experience in migrating legacy control and safety systems, no matter who the manufacturer is. We support easy migrations from legacy PLCs to ControlEdge PLC through our application migration tool, IO wiring kits, and connectivity options to legacy networks.

Service and Support

From installation and startup through system maturity and future expansion, quality remote and on-site support ensures the maximum return of investment in your automation system.

The TotalCare Service program offers carefully designed service packages in addition to our standard support commitment under the Scalable Control Solutions portfolio. The program provides TotalCare Lite and Enhanced

service package options that work on an annual subscription basis. It covers system updates, upgrades, corrective and preventive maintenance, support requests, and more.

Factory-trained and experienced Remote Service engineers provide technical support and prompt answers to questions regarding procedures, documentation, operation, service, training, and system enhancements. Remote Service also includes a review of operational procedures, software analysis, and diagnostic evaluations when required.

For more information

To learn more about Honeywell's ControlEdge Family of Controllers, visit www.honeywellprocess.com/PLC or contact your Honeywell account manager.

THE
FUTURE
IS
WHAT
WE
MAKE IT
—

Honeywell