

PLC/RTU/PAC Hybrid Controller



ControlWave® High Performance and High Adaptability.

PLCs and RTUs monitor and control field devices, gather data, and supply information critical to your operations and business processes.

Only ControlWave® combines the standard capabilities of process-plant PLCs with Bristol Babcock's years of SCADA RTU experience to provide a flexible and scalable Hybrid controller family that provides unique, recognizable benefits for a broad range of water & wastewater, oil & gas, and process applications.

The entire ControlWave Process Automation Controller family has exceptional wide area and local area networking capability allowing you to integrate, measure and control every area of your operation.

ControlWave Built on Industry Standards.

ControlWave has been designed to provide an open, non-proprietary architecture relying on the most widely accepted technology standards.

- IEC 61131-3 - the global standard for RTU/PLC programming.
- Ethernet - the most widely used and supported networking communication standard.
- TCP/IP, FTP & HTML - the communication standards we all use, every day.
- Modbus and DNP3 - the defacto standards for SCADA interoperability.
- OPC - the standard interface to most HMI software.
- API 21.2 - meets the requirements for multiple meter runs.

This adoption of industry standards allows you to grow with the latest technologies and utilize the broadest array of engineering services for initial system engineering, integration and continued local support.

ControlWave Secure Data

First developed by Bristol Babcock in the 1980's, our distributed intelligence has surpassed the capabilities of common PLC and RTU products to remotely monitor and control industrial processes. This intelligence was later extended to provide distributed alarming and historical data storage.

With the experience gained in addressing our customers growing dependence on operational data, we have employed unique concepts and solutions in ControlWave to ensure historical data integrity and notification of process abnormalities to help you make informed decisions about your operations. The result is improved corporate, safety, efficiency and return on your investment.

ControlWave Offers Remarkable Flexibility.

The ControlWave family features the broadest range of performance characteristics, modularity, expandability and environmental suitability to meet the diverse requirements of in-plant distributed control applications. Plus a wide area network of SCADA applications. All ControlWave PLCs, RTUs, and flow measurement products are designed for real world industrial applications.

- Distributed Alarm & Historical database for highest data integrity.
- Unique memory architecture for fast application execution, non-volatile data archive and file storage.
- BSAP, Modbus, DF1, DNP3 and CIP protocols built-in.
- FTP server.
- Distributed Ethernet I/O.
- Wide temperature range (-40 to +70°C).
- Class I, Div. 2 hazardous location and CE approval.



FLOW MEASUREMENT



CONTROLLERS



INSTRUMENTS



SCADA



SOLUTIONS

ControlWave is the Ideal Solution for In-Plant Control Applications.

ControlWave provides exceptional expandability for medium to large applications where there is a high concentration of I/O points. ControlWave offers I/O expandability, Ethernet network segmentation and optional redundant configurations for the most demanding plant applications.



- 586 based processor provides unparalleled performance.
- Up to three 100 Mbps Ethernet ports with built-in router.
- Up to four serial communication ports.
- Up to 256 local I/O points.
- Multiple I/O racks for application expansion.
- Hot Swap I/O replacement.
- Optional redundant CPU and communication.
- Optional redundant I/O.



ControlWave Micro. High Performance at a Lower Cost.

ControlWave Micro brings a compact, low power consumption hybrid controller (RTU/PLC) for remote SCADA applications. ControlWave Micro is also available in pre-configured enclosures with the most commonly used communication and accessibility options. This reduces the need for custom engineering of panels and standardizes the maintenance effort, resulting in lower overall cost of ownership.



- High Speed ARM 9 based processor.
- Expandable to up to 224 I/O local points.
- Very low power consumption to minimize battery backup requirements and power system costs.
- Ideal for solar power applications.
- 100 Mbps Ethernet port for network connectivity.
- Up to eleven serial communication ports.
- Built-in wireless and dial-line modem options minimize enclosure size and cost.
- Mixed I/O modules for cost effective RTU applications.
- Optional Nema 4 enclosure packages offer out-of-the-box installation.

ControlWave Designer Software Cuts Time and Cost.

Our programming software fully meets the IEC 61131-3 standard. In addition to the basic IEC 61131-3 functions and function blocks, ControlWave



Designer brings over twenty years of SCADA and plant control experience in Bristol Babcock's ACCOL III measurement and control function block library. ACCOL III provides over sixty function blocks that engineers will find a valuable time saver. Designer enables them to quickly start projects, re-use existing code and simplify maintenance in the long term. Add to the suite the capability to mix and match programming languages into one solution and you have an engineering tool deployable across the skills base of your entire organization.

This means reduced engineering time and cost and consequently, quicker ROI for the end user.

- IEC 61131-3 Ladder Diagram, Function Block Diagram, Structured Text, Function Chart and Instruction List programming.
- Popular ACCOL III 'process control' function block library.
- AGA flow calculations built-in.
- Powerful on-line edit and debug provides a valuable engineering tool.
- I/O Simulator allows program testing on your PC without the PLC/RTU hardware.
- Create your own reusable User Defined Function Blocks and libraries. This 'Object Oriented Programming' capability significantly reduces engineering time and cost.
- Designer's ability to mix languages in the same program provides ease of use and superior documentation.

Bristol Babcock. Unbeatable Service and Quality.

Bristol Babcock is your complete solution provider. Whether it is transmitters and analog instruments, RTU/PLCs, gas flow computers, communication software or SCADA HMI, Bristol's experience, engineering services and quality are unsurpassed.



Bristol Babcock

The Measure of Quality for Over a Century

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