

FEATURES

- Remote Monitoring
- Scheduled Control
- Alert Notifications
- Data Logging
- Personal Web Portal
- Dedicated Mobile Interface
- No Recurring Costs
- Plug and go networking
- Inexpensive

REMOTE ACCESS

Anytime-anywhere access via web browser or web-enabled mobile phone.

MONITORING

Monitor up to 16 inputs or registers from a PLC or other device in real time.

CONTROL

Control up to 16 outputs or set points in a PLC or other device.

ALERTING

Alert notifications via email and/or text messaging.

DATA LOGGING

Monitoring and control data is available online for the previous year. High resolution data is available for the previous month.

INTEGRATION

Connect to the PLC using Modbus RTU on the serial port and/or Modbus TCP on the LAN port.

WEB ENABLE YOUR THINGS

The BAYweb Relay provides the ability to quickly and economically add remote monitoring, control, and alerting capabilities to programmable logic controllers (PLCs) and other dedicated devices.

Now, all devices that support Modbus protocols can be web enabled by simply connecting them to the BAYweb Integrator.

Just plug the Integrator into the Internet and your system is online with your personal web portal.

Applications

Create a whole new class of applications with a PLC and BAYweb Integrator combined with the appropriate sensors and devices. Some ideal web-enabled applications include:

- Power consumption metering and logging
- Solar field monitoring, logging, and alerting.
- Waste water treatment monitoring and alerting.
- Building automation remote control, monitoring, and alerting.

Monitoring

The BAYweb Integrator acquires up to 16 points of data from one or more PLCs and uploads the data to our database servers every 10-seconds.

The monitoring points are configured using an applet on the web portal. The Integrator converts and scales the PLC data into the appropriate units and data format based on the point configuration. This provides the ability to easily convert the output from sensors and transducers to the desired unit of measure, directly usable for reporting and alerting.

The Integrator supports the following PLC data formats: digital (on/off), analog (16 bit signed or unsigned, or binary coded decimal), and counter (16 and 32 bit).

Analog data is converted into 32 bit floating point values and scaled using a configurable offset, span, and precision. The counter data type is typically used to sum a measurement, such as power consumption. This provides the ability to measure usage that is not affected by a loss of Internet connectivity.

Control

The Integrator can write up to 16 different control or set points to one or more PLCs with a nominal maximum response time of 10-seconds.

Similar to monitoring points, the control point data is converted and scaled into the appropriate units and data format based on the point configuration.





SIMPLE CONNECTIVITY

Bay's plug and go networking technology enables you to utilize all of the Internet-based capabilities by simply plugging it in to your network. No networking experience is required.

SMART PHONE SUPPORT

Dedicated portals designed for most major phones like the Apple iPhone provide access to your things from just about anywhere.

ABOUT BAY

Bay is an energy solutions company that provides products and services to a broad range of industrial, commercial, government, and residential customers. We provide cost savings for our clients through increased energy efficiency, improved system management, better reliability, and reduced downtime.

Bay was founded in 1983, and as of December 2014, our solutions are providing over 1.8 terawatt-hours of annual energy savings for our customers in 70 countries.

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Alerting

The BAYweb Integrator provides alert notifications for each of the 16 monitoring points via email and/or text enabled mobile phone. Each alert can be configured to send a message to one or more recipients. The alert is triggered when the monitoring point data exceeds the high or low alert limits configured for each port.

Upon sensing an alert condition, the Integrator will immediately send a message to our data center, which in turn will send the alert message to the configured recipients. In addition to a log of all alert events, all of the current monitoring point data is logging for later analysis. Once an alert has been sent, it will not be sent again until a configurable time period has elapsed.

Nominal response time from the Integrator sensing the alert to dispatching the message from our data center is three seconds. Delivery time of the email or text message is dependent on your Internet or mobile provider.

Data Logging

Monitoring and control point data is available online for graphing, and exporting (CSV file) for the preceding year.

The data is acquired every 10-seconds and is averaged and/or totaled for 10-minute intervals and stored in the database.

Integration

The BAYweb Integrator provides two methods of communicating with the PLC; using the RS-485 serial port, and using the LAN (Ethernet) port. Both ports may be used simultaneously. Each monitoring and control point may be mapped to any PLC that is connected to the Integrator.

Personal Web Portal

Operate your web devices anytime, anywhere, via web browser or web-enabled mobile phone. Unlimited use of the BAYweb portal is included at no additional charge. This state-of-the-art portal provides real time monitoring and control for an unlimited number of BAYweb devices.

Specifications

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| Part Number: | BW-BCU3 |
| Power Requirements: | 12 - 24 VDC, 50 mA |
| Temperature: | Operating: 0—50° C; Storage 0 - 70° C |
| Dimensions: | 4.0" W x 2.75" H x 1.125" D |
| Weight: | 4.5 oz |
| *Requires a full time Internet connection (broadband, DSL, satellite). | |