Data Acquisition Server

Flexible Data Server For Embedded Applications

A8810

APPLICATIONS

■ Measurement and Verification (M&V)
■ Reduce energy costs
■ Access energy information from local and remote sites
■ Benchmark building energy usage
■ Demand Response
■ Renewable energy

FEATURES

■ Tracks data in real time...providing the right information for trending, planning, and identifying waste
■ Alarm notification for data points above or below target levels...quick notification for optimal performance maintenance
■ Compatible with multiple communication protocols...push or pull data to energy dashboards and software applications for easy system integration
■ Industrial temperature range (-30° to 70°C), perfect for embedded applications... speeds up development and integration of energy data
■ DIN rail mounting...easy installation

DESCRIPTION

The **A8810 AcquiSuite™** data acquisition server allows users to collect energy data from meters and environmental sensors and send it via Modbus communication protocol (wired or wireless) to IP-based applications. No software is required. Operation is plug-and-play, and information can be accessed using any web browser. The compact housing and industrial temperature range make the A8810 compatible with embedded applications. Reduce development time and speed up integration by collecting and distributing energy data directly from your equipment.
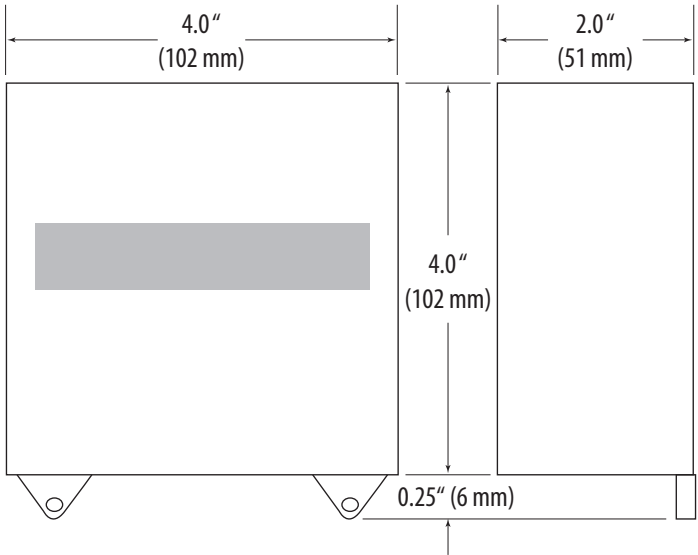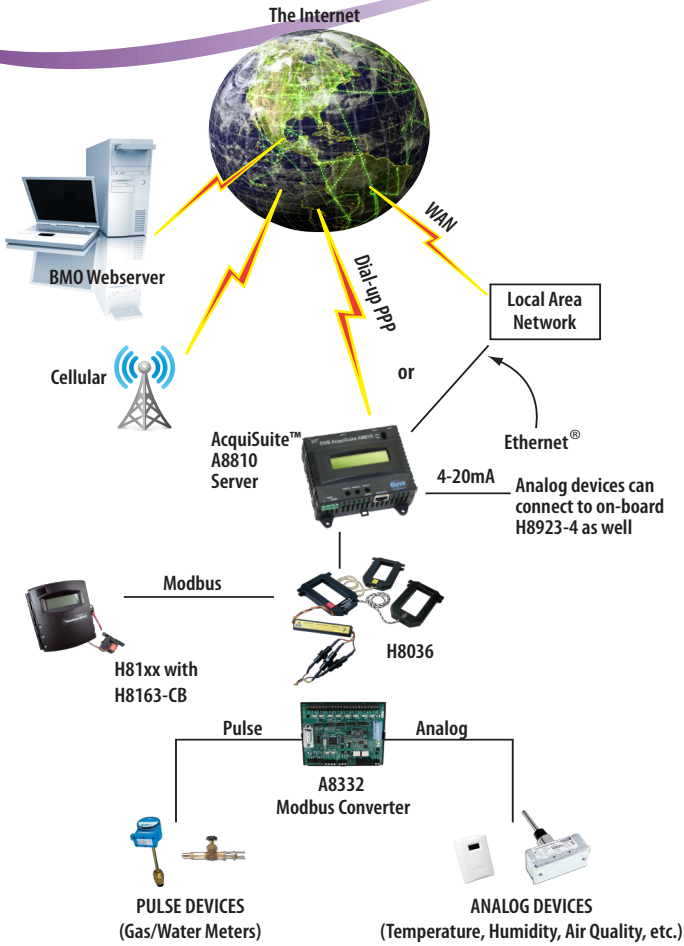
NETWORK INTEGRATION

SPECIFICATIONS

Input Power	24VDC, 500mA*
Isolation	RJ45 Ethernet and RS-485 port isolated to 1500VDC from main board (power and USB not isolated)
Main Processor	ARM 9 embedded CPU
Operating System	Linux 2.6
Flash ROM	16MB NOR Flash (expandable with USB memory device)
Memory	32MB RAM
LEDs	Ethernet, Modbus TX/RX, power, alarm
Console	2 x 16 LCD character, two push buttons
Serial Port Input	RS-485 Modbus, supports up to 32 external devices (expandable)
Communication:	
Protocols	Modbus/RTU, Modbus/TCP, TCP/IP, PPP, HTTP/HTML, FTP, NTP, XML, SNMP-Trap
LAN	RJ45 10/100 Ethernet, full half duplex, auto polarity
USB	USB expansion port
Environmental:	
Operating Temperature Range	-30° to 70°C (-22° to 158°F)
Operating Humidity Range	0-95% RH noncondensing
Approvals	CE; FCC Part 15, Class A; EN 61000; EN 61326; UL61010 recognized

* This unit is to be sourced by a Class 2 power supply with the following output: 24VDC, 500mA min. not to exceed 8A.

APPLICATION/WIRING EXAMPLES

The Internet

BMO Webserver

Cellular

WAN

Dial-up PPP

Local Area Network

or

AcquiSuite™ A8810 Server

Ethernet®

4-20mA — Analog devices can connect to on-board H8923-4 as well

Modbus

H8036

H81xx with H8163-CB

Pulse   Analog

A8332 Modbus Converter

PULSE DEVICES (Gas/Water Meters)

ANALOG DEVICES (Temperature, Humidity, Air Quality, etc.)

DIMENSIONAL DRAWING

4.0" (102 mm)

2.0" (51 mm)

4.0" (102 mm)

0.25" (6 mm)

THE ACQUISUITE SYSTEM ALLOWS...	
...Internet Display of Data Using the BMO Website	View performance data in an easy graphical format. Store, display, and download historical data in a secure SQL database. Design custom views of data from one or more buildings or systems.
...Security and Flexibility	Store data on board in nonvolatile memory. Protect information in the event of a power failure. Time-stamp all interval data with an on-board real-time clock.
...Compatibility with Existing Systems	Use the I/O module to connect to existing sensors and meters. Use TCP/IP protocols to interface with spreadsheets, databases, text files, etc.

ORDERING INFORMATION

CE c RU us

MODEL	DESCRIPTION
A8810	AcquiSuite EMB data acquisition server