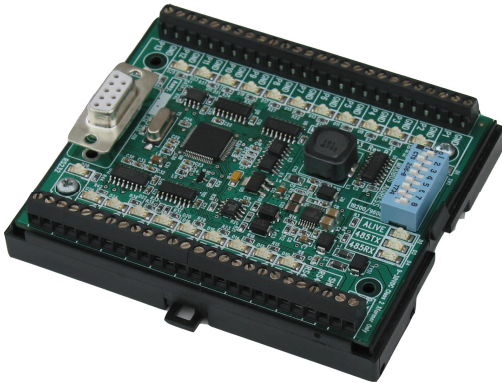


A8911-23 High Density Pulse Module



Description

The A8911-23 Input Module provides a convenient way to add multiple pulse output devices to Modbus systems such as the AcquiSuite data acquisition network. The A8911-23 accepts up to 23 standard pulse sensors and can function as a slave device with any Modbus master. This data can easily be integrated to a network of other critical energy sensors such as Modbus power meters to provide a comprehensive energy monitoring solution.

The A8911-23 can be incorporated with cost effective data acquisition and wireless metering solutions. The AcquiSuite data acquisition server and Modhopper wireless transceivers, as a properly integrated system, provide high performance and low cost for:

- Demand response applications
- Benchmarking building operations performance
- Verification of energy savings and utility costs
- Cost allocation to departments or tenants

The A8911-23 allows users to bring data from any pulse output device into a new or existing Modbus network:

- Electrical, gas and water usage and costs
- BTU's and flow
- Industry standard pulse inputs

The A8911-23 is ideal for applications with a high density of pulse output devices, giving users' access to meters that would previously require multiple modules. The flexible module allows integration with any Modbus master device such as the Acquisuite data acquisition server, a PLC, or any Modbus software based system. By combining the A8911-23 with a wireless Modbus module such as the Obvius Modhopper, users gain access to remote groups of meters previously unattainable. Essentially, the A8911-23 allows users to bring data from any pulse output device into a new or existing Modbus network.

Installing and commissioning the A8911-23 is a snap!

- External communications handled via shielded twisted pair 18-22 gauge wire allowing communication up to 4000 feet
- Pulse input communications up to 200 feet (consult factory for longer runs) using 18-24 gauge control wire
- DIN rail mounting makes installations quick and easy
- The onboard dipswitch sets the Modbus address.
- Industry standard pulse inputs connect to most pulse output meters
- LED verification of RS 485 Modbus TX/RX communications
- Check device status at a glance. LED indicators for each pulse input allow for fast indication and verification of pulses!
- Nonvolatile memory retains configuration and pulse count totals during power failures.

Applications

- Demand response program control and reporting
- Cost allocation to tenants and third parties
- Measurement & verification of energy savings
- Gas, water, steam, and BTU meters
- Monitoring performance of building systems (e.g., chillers, boilers, fans)

The ideal solution for metering or submetering of consumption and rates for:

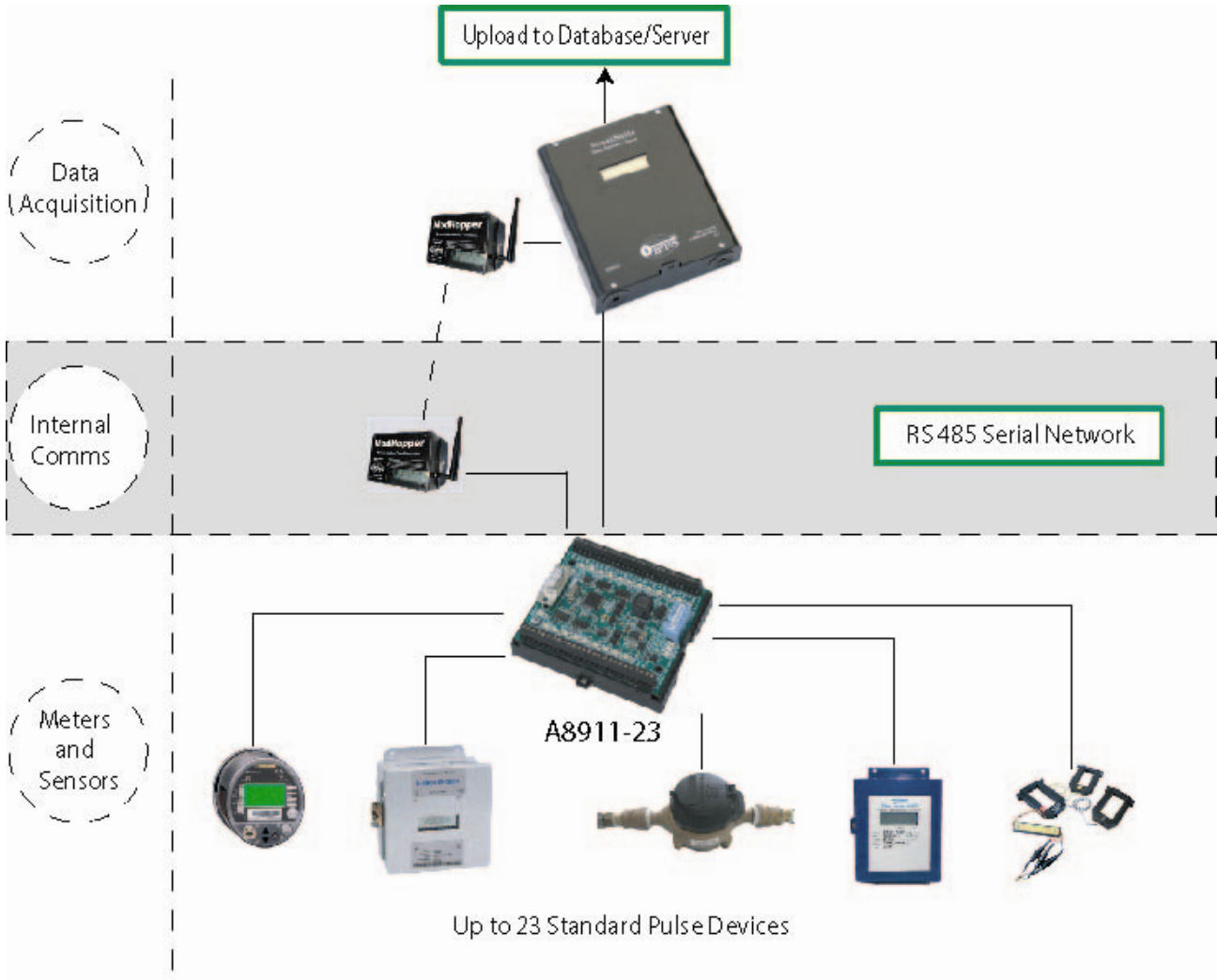
- Electricity
- Gas
- Steam
- Chilled and hot water
- Domestic water
- BTU's

Perfect as a standalone component in any Modbus network, the A8911-23 can be combined with other Obvius products for a complete submetering solution:

- Acquisuite data acquisition server provides reliable and cost effective data acquisition from a wide range of Modbus meters and devices
- Modhopper provides wireless RS 485 communications minimizing installation costs
- Multi Circuit DC Monitor is designed specifically for photovoltaic solar applications and monitors current from any DC power source
- Building Manager Online (BMO) gives access to interval data for authorized users from anywhere in the world

Integration with Acquisuite saves time and money

- Plug and Play driver connectivity to standard Modbus meters minimizes installation time and costs by eliminating register configuration
- "Flex" I/O inputs provide easy connections for analog, pulse and resistive sensors allowing for expansion beyond just pulse output devices
- Integrated web server provides setup and configuration using any industry standard web browser (i.e., Netscape™ or Internet Explorer™)



SPECIFICATIONS

Processor	Arm7, field upgradeable firmware.
LED	23 input status LEDs (red), 2 Modbus TX/RX (yellow), 1 power/alive status (green).
Protocols	Modbus/RTU
Power Supply	9VDC to 30VDC, 200mA, Required (not included)
Serial Port	RS-485 Two Wire, 19200 or 9600 baud. N81
Pulse Inputs	23 independent pulse count inputs. Intended for use with isolated dry contact outputs. Pulse rate/width user selectable to 10hz, 50hz, or 100hz Pulse rate option: 10hz, minimum pulse width 50ms Pulse rate option: 50hz, minimum pulse width 10ms Pulse rate option: 100hz, minimum pulse width 5ms Contact closure threshold 100Ω to 2.5kΩ user selectable Pulse count values are stored in non-volatile memory 32 bit pulse counter: Rollover at 4.295 billion per channel
Isolation	Pulse inputs, power inputs and RS485 are non-isolated.
Environmental North America:	Indoor, temperature 0° - 50°c, 0 - 95% humidity, non-condensing.
Europe:	Indoor, temperature 5° - 40°c, 0 - 90% humidity, non-condensing.
EMC	FCC CFR 47 Part 15, Class A
Size	4.13" x 3.39" x 1.18H" (105mm x 86mm x 30mm)
Mass	3.7 oz (105 g)
Mounting	DIN rail mountable