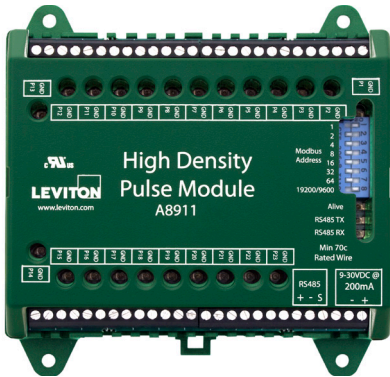**LEVITON**®

High Density Pulse Module

Description

The High Density Pulse Module (A8911) provides a convenient way to add multiple pulse output devices to Modbus systems such as the Energy Monitoring Hub. The A8911 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.

Applications

The High Density Pulse Module 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 Energy Monitoring Hub (EMH).

• Demand response program control and reporting
• Cost allocation to tenants and third parties
• Measurement & verification of energy savings
• Monitoring performance of building systems
• Electric submetering

Features

• External communications handled via shielded twisted pair 18-22 gauge wire allowing communication up to 4,000 feet
• Pulse input communications up to 200 feet (consult factory for longer runs) using 18-24 gauge control wire
• DIN or wall mounting make installations quick and easy
• The onboard dip switch sets the Modbus address
• Industry standard pulse inputs connect to most pulse output meters
• Device verification - LED indicators for each pulse input allow for fast indication and verification of pulses
• LED verification of RS 485 Modbus TX/RX communications
• Non-volatile memory retains configuration and pulse count totals during power failures
• Designed specifically for metering applications
• Easily add pulse meters to Modbus network
• Field upgradable firmware
• Five year warranty

Specifications

Device	
Processor	ARM7 field upgradable firmware
LEDs	23 input status LEDs (red), 2 Modbus TX/RX (yellow), 1 power/alive status (green)
Power	
Power Supply	9VDC to 30VDC, 200mA, Required (not included), not to exceed 8A
Communication	
Protocols	Modbus/RTU
Inputs	
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 • Contact closure threshold: 100 Ω to 2.5k Ω user selectable • Pulse count values are stored in non-volatile memory • 32 bit pulse counter: Rollover at 4.295 billion per channel
Serial Port	RS-485 two wire, 19200 or 9600 baud, N81
Isolation	Pulse inputs, power inputs and RS485 are non-isolated
Physical	
Weight	3.7oz (105g)
Size	4.13" x 3.39" x 1.18" (105mm x 86mm x 30mm)
Environment	
North America	Indoor, 32 to 122°F (0 to 50°C), 0-95% humidity, non-condensing
Codes & Standards	
Emissions	FCC CFR 47 PART 15, Class A

Ordering Information

High Density Pulse Module	
Cat. No.	**Description**
A8911-023	High Density Pulse Module, 23 Inputs
A8911-MML	High Density Pulse Module, 23 Inputs with 24VDC power supply - Only available integrated in Large Mini Meter MMU*
A8911-MMX	High Density Pulse Module, 23 Inputs with 24VDC power supply - Only available integrated in Extra Large Mini Meter MMU*

* See Mini Meter MMU configuration form