MODBUS STICK

Potted electronics, a high-gain antenna, and a multi-mount aluminum base all contained in a high-impact polycarbonate “Stick”.

LONG RANGE 3+ MILES

PROVIDES A WIRELESS INTERFACE TO A MODBUS DEVICE

MESSAGE-FORWARDING CAPABILITY

LOW POWER CONSUMPTION

SIMPLE TO INSTALL AND MAINTAIN

FEATURES

• Potted electronics, a high-gain antenna, and a multi-mount aluminum base all contained in a high-impact polycarbonate “Stick.”
• Provides a wireless interface to remote Modbus sensors
• RS485 Modbus RTU interface (RS232 also available)
• Supports multiple Modbus devices
• Automatically reads and transmits sensor registers at user-definable intervals
• Outbound capability for sensor Modbus register updates
• Writes Modbus registers
• Message-forwarding / mesh-networking capability
• Rugged design for demanding outdoor industrial environments
• Range up to 3 + miles
• Simple to install and maintain
• Class 1 Division 2, Temp Code T5, Groups C&D. Conforms to ISA 12.12.01 and UL 916, Certified to CSA C22.2 No. 142 and CSA C22.2 No. 213

MODELS

Multi-IO Module (MIOM)

• 8 Analog Inputs
• 6 Digital Inputs
• 4 Relay Outputs

Modbus

• RS485 interface (RS232 available)
• Automatically reads and transmits sensor registers at user-definable intervals
• Writes modbus registers

Mirroring

• Mirrors the configured data-registers from gateway
• Gateway data available to be read by RTU device

SignalFire Breakout Board connects easily for modbus applications.

Multi-IO Module (MIOM)
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TECHNICAL SPECIFICATIONS

**Operating Temp**
-40°C to 70°C

**Humidity**
0% – 100% condensing

**Power**
6-36 VDC

**Data Interface:**
Modbus RS485

**Data Update Rates:**
User configurable with configuration utility

**Radio Power:**
500 mW

**Antenna Type:**
Omnidirectional

**Antenna Gain:**
5dB

**Receive Sensitivity:**
-105 dB

**Frequency:**
902-928 MHz license-free ISM band compliant with FCC Part 15

**Range:**
3+ miles (line of sight)

**Networks:**
Up to 65,520 separate networks

**Enclosure:**
Weathertight integrated electronics and antenna. Integrated cable (25’ standard)

**Internal Diagnostics:**
Line voltage, Signal strength, Error conditions

**Safety Rating:**
Class 1 Division 2 Certified, Groups C&D, Temperature Code T5. Certified to CSA C22.2 No. 213, Conforms to ISA 12.12.01

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STANDARD CONFIGURATION ORDER CODES

<table>
<thead>
<tr>
<th>INTERFACE</th>
<th>ORDER CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS485</td>
<td>MBS-CBBL</td>
</tr>
<tr>
<td>MIOM</td>
<td>MBS-MOIM-CBBL</td>
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</tbody>
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