

SignalFire Gateway Stick - Quick Start Guide

SignalFire Model: GW-6-5-5

(Rev 1.1)

Powering the Modbus Gateway

- Connect the 6 wires from the Gateway to the break-out board.
- Supply 6-36VDC to the break-out board.
- The gateway requires <25mA average (150mA peak) at 12VDC.
- The Status LED should blink indicating the system is running

Configure Gateway

- Connect the RS232 port on the break-out to a PC
- Run the SignalFire ToolKit application
- Select the correct COM port and click "Auto-Detect"
- Set radio network address to use. Default is 0
- Remote nodes must be set to the same network to communicate with the Gateway

Check Remote Devices

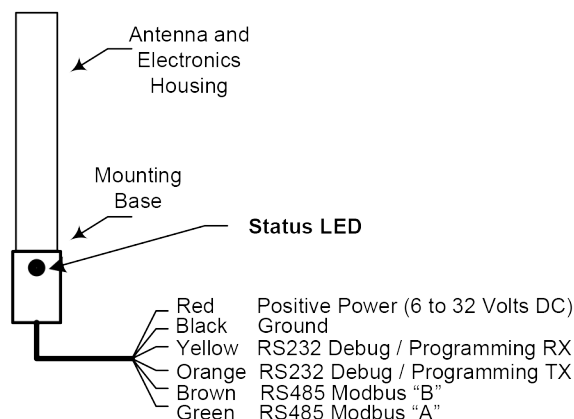
- If one or more remote nodes are configured and powered on, while connected with the SF ToolKit click "Show Modbus Devices"
- A list of all connected remote nodes will be displayed
- If no devices are displayed confirm the radio network is the same for all devices

Test Local Modbus/RS-485 Communications

- Connect the Modbus RTU master to the RS-485 lines
- Configure for 9600 Baud, 8,N,1
- Read register 2025 from Slave ID 247, this should return the supply voltage from the Gateway to confirm Modbus communications
- If no response or a bad response is received, confirm that the RS485 lines are not swapped

Read Remote Data

- Configure the RTU master to read register 9993 from one of the remote Slave ID's
- The gateway should respond with an echo of the Slave ID of the remote device
- This response confirms end-to-end communications are working
- The RTU may now be configured to read the desired data sent in by the remote device. Refer to the specific product manual for register mapping.



Wiring Diagram

WARNING!! DO NOT CONNECT OR DISCONNECT WIRING IN A HAZARDOUS ENVIRONMENT

Status LED

- **Slow Flash (3 second pause)** System is running with one or more remote nodes connected
- **Fast Flash (0.5 second pause)** System is running but no remote nodes are connected
- **Solid On** System Fault, needs service

Installing Gateway

- The gateway mounting base is threaded with a 3/4" NPT
- Gateway may be mounted directly to a conduit mast
- Mount Gateway as high as possible for best range
- Mount away from other metal objects
- Do not mount directly next to a metal surface such as a metal building or pole

Common Issues

- The distance between the nodes and the gateway should be at least 15-20 feet to avoid communications failure due to the RF signal being too strong
- All devices must be configured with the same radio network to communicate
- Each remote device connected to a Gateway must have an unique Slave ID



For Additional Support Contact

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