

Overview

This application note describes the overall essentials of installing OneSix OPC/DDE Server and setting up the Wifi Sensors for use on a wireless network.

Note: Before installing the USB Programming Adapter to your PC, please install the Wifi Sensor Utility software first!

Note: Always have the USB side of the USB Programming Adapter connected to your PC before connecting the Adapter to the sensor.

Note: Software requires the Windows operating system (XP, Vista, 2000 Server, 2003 Server)

Sensor Setup

1. Install the Wifi Sensor Utility.
2. Connect the USB Programming Adapter to your PC.
3. Slide the sensor power switch to the ON position
4. Connect the other end of the USB Programming Adapter to the CONFIG port of the sensor.
5. Start the Wifi Sensor Utility.
6. Enter the necessary network and security parameters for your wireless network: IP parameters and Wireless Authentication and Security information. Enter the Destination IP for where you want the data delivered which for this application note is the PC where the OneSix OPC/DDE Server will be running. You can optionally save these parameters with an associated name for later use. Just enter a descriptive name in the "Saved Settings" field and then click the Save button. Click the down arrow in the "Saved Settings" list box to recall any previously saved settings.
7. When ready to set up the sensor, click the Update button.
8. When the update has finished, disconnect the USB Programming Adapter from the sensor. (Turn off the sensor if it will be a while before installing.) Slide the sensor power switch to the ON position.
9. Install the sensor near a Wifi access point.

Note: For some sensors, the "service" button is located in the center top of the sensor. For others you will need a paper clip to press the switch. Just momentarily press the service button to cause the sensor to transmit a data packet.

Note: The USB Programmer must be disconnected from the sensor in order for the sensor to transmit data.

OneSix OPC/DDE Server Install and Setup

1. Install OneSix OPC/DDE Server.
2. Start OneSix (either OneSixOPC or OneSix).
3. Review the Quick Start Help and then close the help window.
4. OneSix will scan your computer for attached USB or serial receivers and will display an error "Cannot find Receiver!".
5. Click the "Select Communication Port" button. From the "Select Communication Port" window, select Port Type "TCP/IP Receiver" and click "OK"
6. From the "Add/Delete Node IP Connections" window, click "OK". Note that OneSix uses the TCP/IP Receiver driver to process packets from the Wifi sensors even though there is no TCP/IP Receivers set up. OneSix displays the "Add Sensors" window.
7. Momentarily press the service button of the sensor. If OneSix receives the sensor packet it will display a default tag name in the New Device section. If no sensor names appear in the New Device section press the service button again.
8. If desired, you can change the sensor name and its offline time (which typically is the transmit rate). Select the sensor from the New Device section and click Edit. Edit the sensor parameters and then press OK.
9. Once finished with adding sensors, click OK. OneSix is now ready and has tags available for the installed sensors.

Note: If you are using a software firewall on your computer like Windows Firewall, this software may prompt you when OneSix tries to open port 6767 for listening. Give permission for OneSix to use the port.