2680A-RF24G 120 / 230

Wireless Network Bridge

Instruction Sheet

Introduction

The 2680A-RF24G 120 or 230 Wireless Network Bridge (hereafter referred to as "the Wireless Bridge") is a wireless network device that creates a wireless link between Fluke 2680 Series or NetDAQ models and a computer (PC) running Fluke DAQ or NetDAQ Logger application software.

Note

The Wireless Bridge operates in the 2.4 GHz frequency range using the WiFi Wireless-G or IEEE-802.11g standard supported internationally. However, when operating outside the United States, check with the appropriate governing agency in the host country prior to Wireless Bridge operation.

This instruction sheet assumes familiarity with the Fluke DAQ or NetDAQ Logger software and 2680 Series or NetDAQ model operation. If unfamiliar with Fluke DAQ or NetDAQ Logger software or the 2680 Series or NetDAQ models, refer to the software user documentation or the 2680 Series or NetDAQ users manuals. Figure 1 shows the Wireless Bridge.

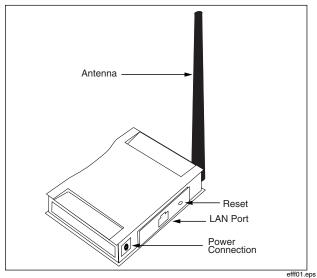


Figure 1. 2680A-RF24G 120 / 230 Wireless Bridge

Contacting Fluke

To locate an authorized service center, visit us on the World Wide Web at www.fluke.com or call Fluke using any of the following numbers:

USA: 1-888-99-FLUKE (1-888-993-5853) Canada: 1-800-36-FLUKE (1-800-363-5853)

Europe: +31 402-678-200 Japan: +81-3-3434-0181 Singapore: +65-738-5655

Anywhere in the world: +1-425-446-5500

Shipping Contents

The Wireless Bridge comes with the following items:

- Instructions for use with Fluke DAQ or NetDAQ Logger software (this sheet)
- Quick Installation Guide
- CD-ROM with set up software and documentation
- Antenna
- 1 meter Ethernet network patch cable
- AC power adapter
- Stand feet/wall-mount-accessory kit
- Universal AC adapter (230 only)

Requirements

A PC with Ethernet port or network connection and Windows XP, 2000, or 98 SE plus a CD-ROM drive is required to set up the Wireless Bridge.

In operation, no Windows drivers or software is required for the Wireless Bridge: it connects directly to an Ethernet port on either a network device or a LAN.

Installation

There are two ways to use the Wireless Bridge – either as part of an "Ad-Hoc" wireless network, or in "Infrastructure" mode.

• "Ad-Hoc" is typically used for an isolated network of 2680 Series or NetDAQ models. In

- this type of wireless network, one Wireless Bridge is connected to the PC, and a separate Wireless Bridge is connected to the 2680 Series or NetDAQ unit(s).
- "Infrastructure" mode is typically used to connect 2680 Series or NetDAQ model units to an existing network through a wireless access point. In this type of wireless network, a Wireless Bridge is connected to the 2680 Series or NetDAQ unit, and communicates with the network through an existing wireless access point or router.

The configuration of the Wireless Bridge is different for these two modes, as described below.

Setting up the Wireless Bridge

The Wireless Bridge must first be connected to a PC running Windows to configure the wireless network settings.

To set up the Wireless Bridge:

- 1. Attach the Wireless Bridge's antenna.
- 2. Plug the included Ethernet network cable into the LAN port on the back panel of the Wireless Bridge.
- 3. Plug the other end of the Ethernet network cable into the network port on the PC to be configured for the Wireless Bridge, or into a hub or other network port connected to the PC.
- 4. Plug the appropriate AC power adapter's DC power cable into the power port on the back panel of the Wireless Bridge. If using the universal AC power adapter, select and install the correct power mains plug adapter. Then plug the AC adapter into an electrical outlet.
- 5. Insert the Setup CD-ROM into the PC CD-ROM drive. The setup utility should run automatically. If it does not, click the Start button and choose Run. In the Run box, enter "d:\setup.exe" (where "d" is the letter of the CD-ROM drive).
- 6. Click the "Setup" button to start the Setup Wizard.
- 7. Make sure that the Wireless Bridge is connected, and then click the "Next" button to find it.
- 8. The screen will show a list of Wireless Bridges on your network. Click the name of the one you are installing in the selection box, and then click the "Yes" button.

- 9. When asked for a password, enter "admin" (in lowercase letters) for the Password. Then click the "Enter" button.
- 10. The next screen gives a choice of two wireless modes. If you are setting up an Isolated network of 2680 Series and NetDAQ models, continue at "Set up for Isolated Network (Ad-Hoc)". If you are setting up a General network or connecting to an existing wireless network, go to "Set up for General Network (Infrastructure Mode)" below.

Setup for Isolated Network (Ad-Hoc Mode)

- 1. To set up an Isolated network, click the "Ad-Hoc" radio button on the Mode Settings screen in the Wireless Bridge Setup Wizard.
- 2. In the "WB Name" field, enter a name for the Wireless Bridge that is different from any other Wireless Bridge on the same network. Click the "Next" button to continue.
- 3. In the Wireless Settings screen, enter a name for the wireless network's SSID. This name identifies the wireless network, and must be the same on all wireless devices in this network.
- 4. The default Channel and Network Mode settings normally do not need to be changed for a 2680 Series or NetDAQ Isolated network. Click the "Next" button to continue.
- 5. Skip the IP Settings on the next screen by clicking the "Next" button.
- 6. The security settings on the next screen are optional. For a simple open network, keep the default setting of "Disabled", and press "Next" to continue.
 - If you want to use or have a requirement for the security functions, see the *Wireless-G Ethernet Bridge User Guide* on the CD-ROM for more information.
- 7. Click the "Yes" button to confirm and save these settings.
- 8. Click "Exit" to exit the Setup Wizard.

The Wireless-G Ethernet Bridge is set up, and now can be unplugged from the network port and connected to the 2680 Series or NetDAQ instrument or PC where it will be used.

Set up for General Network (Infrastructure mode)

"Infrastructure" mode allows the 2680 Series or NetDAQ unit to connect to an existing wireless network. The setup for Infrastructure mode is similar the Ad-Hoc instructions above, except that the settings information must be obtained from a network administrator.

To set up Infrastructure mode:

- 1. Click the "Infrastructure" radio button on the Mode Settings screen in the Wireless Bridge Setup Wizard.
- 2. In the WB Name field, enter a name for the Wireless Bridge that is different from any other Wireless Bridge on the same network. Click the Next button to continue.
- 3. In the Wireless Settings screen, enter the SSID for the existing wireless network. This name identifies the wireless network, and must be obtained from the network administrator.
- 4. Channel and Network Mode settings are not used for Infrastructure mode. Click the "Next" button to continue.
- 5. If your network has a DHCP server, click the "Automatically obtain an IP address (DHCP)" radio button on the IP Settings screen (confirm this with the network administrator). Otherwise, skip the IP Settings. Click the "Next" button.
- 6. If the existing wireless network uses encryption or other security, set the Security Settings with the information from your network administrator. Press the "Next" button to continue.
- 7. Click the "Yes" button to confirm and save these settings.
- 8. Click "Exit" to exit the Setup Wizard.

Operation

Connect the Wireless Bridge to the 2680 Series or NetDAQ model or PC with which it will be used.

Make sure that there is a Wireless Bridge set up and connected to each 2680 Series or NetDAQ unit used on the wireless network. If this is an Isolated ("Ad-Hoc") network, be sure there is a Wireless Bridge connected to the PC as well.

Start Fluke DAQ or NetDAQ Logger software and turn on the 2680 Series or NetDAQ model instrument(s).

Then connect to the 2680 Series or NetDAQ unit(s) through Fluke DAQ or NetDAQ Logger software in the same way as if you were using a regular wired Ethernet network connection.

Specifications

Manufacturer's model: WET54G v.2

Standards: IEEE 802.11g, IEEE 802.11b, IEEE

802.3, IEEE 802.3u

Ports: One 10/100 Auto-Cross Over

(MDI/MDI-X) Port, Power Port

Buttons: Reset Button

Cabling Type: Category 5 or better

LEDs: Power, Ethernet, Wireless-G Transmit Power: 16 ± 1 dBm @ 11 Mbps CCK

12 ± 1 dBm @ 54 Mbps OFDM

Security Feature: WEP Encryption, WPA, RADIUS

WEP Key Bits 64/128-bit

Protocols: 802.11g: OFDM (54 Mbps)

802.11b: CCK (11 Mbps), CCK

(5.5 Mbps), DQPSK (2 Mbps), DBPSK

(1 Mbps)

Dimensions: 4.96" x 1.06" x 4.21" (126 mm x 27 mm x

107 mm)

Unit Weight: 8.50 oz. (0.24 kg)

Power: 5 V dc, supplied by 100-120 V ac power

adapter (120 model) or universal 120-240

V ac power adapter (230 model)

Certifications: FCC, CE

Operating Temp.: 32 °F to 104 °F (0 °C to 40 °C)

Storage Temp.: -4 °F to 158 °F (-20 °C to 70 °C)

Operating Humidity: 10 % to 85 %, Non-Condensing

Storage Humidity: 5 % to 90 %, Non-Condensing

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