

2680A-RF24G

Wireless Network Bridge for 2680 Series or NetDAQ

Technical Data



The 2680A-RF24G is a wireless network Ethernet bridge for wireless operation of the Fluke 2680 Series Data Acquisition Systems and NetDAQ® Networked Data Acquisition Units. It provides a wireless network link between a 2680 or NetDAQ and a computer running 2680 Series or NetDAQ application software.

Wireless links are useful when data acquisition is needed in remote, inaccessible, or environmentally hostile locations. Wireless is also useful when the data being acquired is in a location that is moving, such as on an assembly line or track, or simply when wired connection to a computer is impractical or inconvenient.

The 2680A-RF24G Wireless Network Bridge connects to 2680 Series and NetDAQ models or to an Ethernet port on a computer. It also allows users to connect 2680 Series and NetDAQ models to compatible existing wireless networks.

A wireless network for the 2680 Series and NetDAQ models requires two wireless bridges. One wireless bridge is connected to the 2680 Series or NetDAQ model unit; a second wireless bridge is connected to the computer. An alternative to the second wireless bridge is a compatible wireless access point on an existing wireless network, which would allow connection to that wireless network instead.

Features

- Secure spread spectrum frequency-hopping transmissions
- WiFi® Wireless-G IEEE-802.11g / IEEE-802.11b compatible
- Auto-Cross Over 10/100 Mbs Ethernet port
- Up to 300 ft (100 m) indoor range
- Easy positioning, flexible antenna
- Simple operation with no drivers required

Product summary

The 2680A-RF24G Wireless Network Bridge allows users to create wireless 2680 Series or NetDAQ networks by providing a radio frequency link between the data acquisition unit and a computer. Two of the wireless bridges form an "ad-hoc" wireless network, which connects 2680 Series and NetDAQ models to a computer wirelessly. It is also possible to use the wireless bridge's "infrastructure" mode to connect one or more 2680 Series or NetDAQ units to a compatible existing WiFi IEEE-802.11b/g wireless network.

The wireless connection between the 2680 Series or NetDAQ models and the computer is transparent, i.e. it appears the same as a wired Ethernet network connection. This means that no special wireless software is required: the standard Fluke DAQ or NetDAQ Logger software, as well as any software that communicates with 2680 Series or NetDAQ models including custom programs, will work with the wireless network.

The Wireless Bridge has an Auto-Cross Over 10/100 Mbs Ethernet port, so you don't need to figure out whether to use a crossover or standard patch network cable. The Auto-Cross Over port allows the Wireless Bridge to be connected directly to either a network device, such as a 2680 Series or NetDAQ unit, or to a network port, such as on a network switch/hub or LAN (Local Area Network) connector.

A wireless network is easy to set up with the Wireless Bridge. Configuration software included on the product CD-ROM allows the user to set up the bridge quickly from a Windows PC, using an Ethernet port on the

PC or over a LAN (Local Area Network) connection. No drivers need to be installed in the computer to either set up or operate with the Wireless Bridge.

An isolated network of 2680 Series and NetDAQ units can be connected wirelessly using two or more of the 2680A-RF24G Wireless Network Bridges, by configuring the bridges in "Ad-Hoc" mode with a few simple settings. Alternatively, 2680 Series and NetDAQ models that are set up for general network operation can be connected to an existing IEEE-802.11g / IEEE-802.11b wireless network, by using one or more wireless bridges configured in "Infrastructure" mode with appropriate settings obtained from the wireless network administrator.

The 2680A-RF24G Wireless Network Bridge provides a wireless connection with a range of up to 300 feet or 100 meters with the included standard antennas. The range may be greater in line-of-sight situations or if using high-gain antennas available from third-party sources.

The Wireless Bridge uses spread-spectrum technology on the unlicensed 2.4 GHz band, and is compatible with the industry accepted Wi-Fi® or IEEE-802.11g and IEEE-802.11b standards. The frequency-hopping spread spectrum transmissions provide secure, reliable operation with good rejection of interference from noise or other RF sources.

Note that these Wireless Network Bridges are approved for use in most countries; however, some locations have additional regulations regarding their use. The user must check with the appropriate local regulatory agencies before operating these wireless bridges.

Specifications

Frequency band	2.4 GHz Frequency-Hopping Spread Spectrum
Standards	IEEE 802.11g, IEEE 802.11b, IEEE 802.3, IEEE 802.3u WiFi certified
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	802.11b: CCK (11 Mbps), CCK (5.5 Mbps), DQPSK (2 Mbps), DBPSK (1 Mbps) 802.11g: OFDM (54 Mbps)
Dimensions	4.96 in x 1.06 in x 4.21 in (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 120 - 240 V ac power adapter (230 model)
Certifications	FCC, CE
Operating temperature	32 °F to 104 °F (0 °C to 40 °C)
Storage temperature	-4 °F to 158 °F (-20 °C to 70 °C)
Operating humidity	10 % to 85 %, non-condensing
Storage humidity	5 % to 90 %, non-condensing
Warranty	90 days

Ordering Information

2680A-RF24G 120

Wireless Network Bridge for 2680 Series and NetDAQ

Included with this model:

Wireless-G Ethernet Bridge, antenna, 1 m Ethernet network patch cable, 120 V/100 V ac power adapter, quick installation guide, CD-ROM with set up software and documentation, Stand feet/wall mount accessory kit and instruction sheet.

2680A-RF24G 230

Wireless Network Bridge for 2680 Series and NetDAQ

Included with this model:

Wireless-G Ethernet Bridge, antenna, 1 m Ethernet network patch cable, 120 V/100 V ac power adapter, quick installation guide, CD-ROM with set up software and documentation, Stand feet/wall mount accessory kit, instruction sheet and universal ac power adapter.

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Fluke Corporation

PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.
PO Box 1186, 5602 BD
Eindhoven, The Netherlands

For more information call:
In the U.S.A. (800) 443-5853 or
Fax (425) 446-5116
In Europe/M-East/Africa (31 40) 2 675 200 or
Fax (31 40) 2 675 222
In Canada (800) 36-FLUKE or
Fax (905) 890-6866
From other countries +1 (425) 446-5500 or
Fax +1 (425) 446-5116
Web access: <http://www.fluke.com>

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