


Wireless Bridge Configuration for Lantronix SGX5150

Introduction

A Wireless Bridge (Ethernet to Wi-Fi Adapter) can be used to connect an IQNCCEN Ethernet Communication Cartridge to a wireless network. This eliminates the need for the satellite controller to be physically wired to a network router or switch for communication with IQ.

 **NOTE:** Port Forwarding must be configured on the router if using IQ-Cloud. Refer to the **IQ™ Central Control System Port Forwarding Instructions** document. Port Forwarding is not required for IQ-Desktop or IQ-Enterprise.

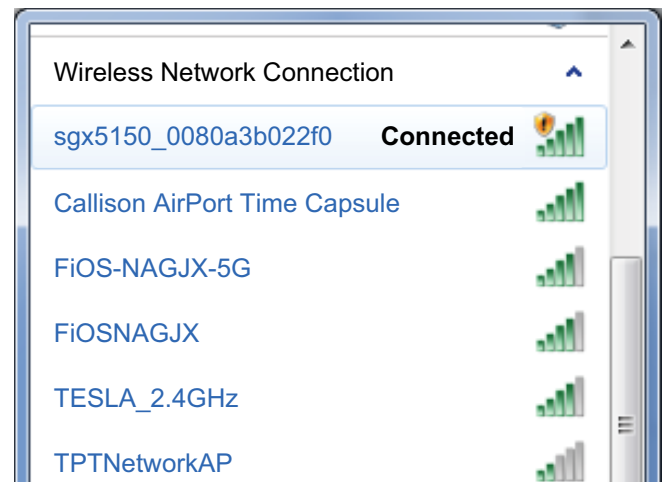
The following information is required for setup:

- **SSID** (wireless network name) of the site wireless network
- Network **Passphrase**
- **Static or Reserved IP Address** for the IQ satellite on the network
- **MAC Address** of the IQNCCEN Ethernet Cartridge (see label)

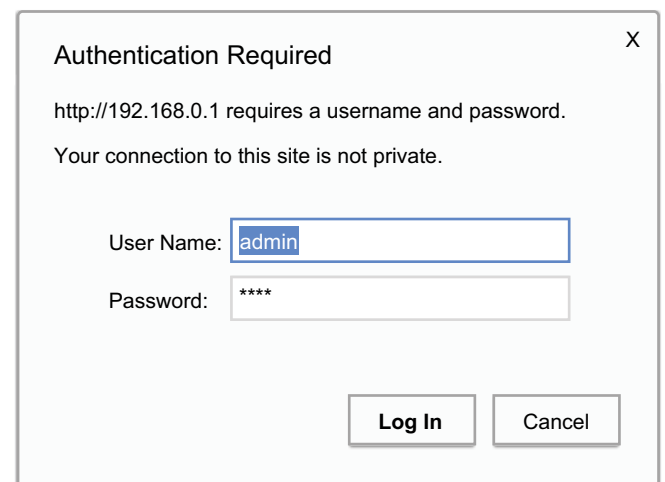
Lantronix SGX5150000US (v8.1 or higher) IoT Device Gateway Setup

1. **Attach the 2 provided antennas** (or an external antenna) to the Gateway.
2. Plug in the provided USB cable into the Gateway and to a **USB Power Supply** (not provided). Alternatively, use a **9-30VDC Power Supply** with barrel connector (not supplied).

3. Use a computer to connect to the Gateway's Wi-Fi. The SSID is **SGX5150_*** (* is the Gateway's 12-digit serial number).



4. From the computer browser connect to **192.168.0.1** and log in using the following default credentials. The credentials are case sensitive.
 - USER ID = **admin**
 - PASSWORD = **PASS** then press **Log In**



5. In the **Quick Setup** screen **Bridge 1 Configuration** section make the following changes:

- Set **Bridge State** to **Enabled**.
- Set **Transparent Mode** to **Enabled**.
- Enter the **IQCCEN Ethernet Cartridge MAC Address** in the **Bridging MAC Address** field.
- Set the Bridging IP Address **Auto Detect IPv4 Address** to **Disabled**.
- Enter the network **IP Address** assigned to the IQCCEN Ethernet Cartridge in the **Bridging IP Address** field.
- Retain all other default settings.

The screenshot shows the 'Quick Setup' page for the SGX 5150. Under the 'Bridge 1 (br0) Configuration' section, the following settings are visible:

- State:** Enabled (radio button selected)
- Transparent Mode:** Enabled (radio button selected)
- Ethernet Interface:** eth0 (dropdown menu)
- Bridging MAC Address:** 00:08:D3:AB:49 (text input)
- Bridging IP Address:** Enabled (radio button selected)
- Auto Detect IPv4 Address:** 192.168.1.248 (text input)
- Bridging IPv6 Address:** <None> (text input)
- Initial Scan Interval:** 15 seconds (text input)
- Scan Interval:** 300 seconds (text input)

6. In the **Available Networks** section:

- Choose the site **Wi-Fi SSID** name from list of available networks then enter the network **Password**.
 - Click **Submit** to save the configuration and complete the SGX5150 Quick Setup.
7. Use the **IQ NCC Configurator Software** and supplied cables to configure the IQCCEN Ethernet Cartridge. See NCC Configurator Instructions.
- Enter the Network **IP Address** assigned to the IQCCEN Ethernet Cartridge (same IP Address used in step 5e).
 - Enter the **Subnet Mask, Gateway, and Port** and send to the cartridge.

The screenshot shows the 'Available Networks' section of the SGX 5150 configuration page. It displays a table of detected Wi-Fi networks with the following columns: SSID, BSSID, Ch, RSSI, and Security Suite.

SSID	BSSID	Ch	RSSI	Security Suite
Callison AirPort Time Capsule	90:72:40:18:30:aa	2462 (ch. 11)	-60	WPA2-PSK-CCMP
FiOS-NAGJX-5G	c8:a7:0a:b7:e8:0c	5745 (ch. 149)	-64	WPA2-PSK-CCMP WPS
TESLA_2.4GHz	48:f8:b3:ec:3c:76	2417 (ch. 2)	-69	WPA-PSK-CCMP+TKIP WPA2-PSK-CCMP+TKIP WPS
FiOSNAGJX	c8:a7:0a:b7:e8:0e	2412 (ch. 1)	-70	WPA2-PSK-CCMP WPS



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