



GX400/GX440

WiFi Xcard Installation Guide



SIERRA
WIRELESS

Rev 1.1
17-Feb-2012



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For up-to-date product descriptions, documentation, application notes, upgrades, troubleshooting tips, and press releases, consult our website: www.sierrawireless.com.

Revision History

Table 1: Revision history

Version	Summary of changes
1.1 Feb 2012	Initial release

Scope

This document provides instructions to install a WiFi Xcard into a Sierra Wireless GX400/440 wireless gateway, allowing wireless connectivity utilizing the 802.11b/g/n standard.

Precautions: Before You Start

Electrostatic Discharge

You are modifying sensitive electronic equipment, and your body may be charged with static electricity. This charge could discharge through electronic components you will handle, possibly destroying your electronic equipment.

Please make sure you are properly grounded (using a grounding strap) before starting any modification of electronic equipment.

Tools Required to Install WiFi Card

1. 2mm or 5/64" Allen (hex) wrench
2. 8mm or 5/16" socket (long enough to fit over SMA connector)
3. Torque wrench for socket above

Procedure

1. All installations require the WiFi upgrade kit (SKU: --- for GX400, SKU: --- for GX440), one kit will be required for each GX product to be upgraded with WiFi connectivity. Kit contains: WiFi expansion card, rubber gasket, lock washer, nut, new black cover with hole for SMA antenna.
2. Turn unit on and install the latest version of ALEOS SW (downloaded from support area of the Sierra Wireless web site). This is required for the new WiFi card to work properly and to detect the WiFi card when it is installed.
3. Remove the four hex screws on top of the unit (used to secure the black cover) using a 2mm or 5/64" size Allen (hex) wrench, place screws in a safe spot, these screws will be used again.

4. Remove the black cover, exposing the expansion card slot in the middle of the unit. Make sure the model number on the WiFi upgrade kit cover matches the model number on the cover you remove.
5. Make sure there are no internal antenna wires which would interfere with the card sliding in the expansion card slot, if there are, gently move them out of the way.
6. Slide the WiFi expansion card into the slot with the SMA antenna connector facing you and on the top of the card. Push in until you feel the electrical bus contacts making connection on the bottom of the card.
7. Push the black gasket onto the SMA antenna connector until it fits into the groove behind the threaded portion of the SMA.
8. Install the new black cover by lining up the SMA antenna connector with the hole in the cover, tilt the rear of the cover slightly to make sure the front bottom of the cover seats in the front ridge, and then push the top of the cover down. This requires some force to make sure the 4 holes line up with the threaded holes on the top of the unit.
9. Re-install the 4 hex screws on top of the unit.
10. Place the lock washer onto the SMA antenna connector and push to the face of the cover.
11. Install then tighten nut with a 5/16 or 8mm socket torque wrench to a torque spec of **8in-lbs**.
12. Test with a WiFi equipped laptop, scan for WiFi SSID (should default to S/N on label on bottom of unit).
13. Connect to WiFi SSID, connection to unit should be made with no encryption and in bridged mode.
14. Test WiFi functionality: Browse to external site when cellular connection is made to check functionality of card (remember to remove any tethered connections to unit, including serial, USB, or Ethernet cables before testing).