

F100 Basic Setup Instructions

Basics

- The F100W-LPG (F100) sends LPG tank level information to an email address using the WiFi network where an LPG tank is located.
- The F100 unit can be setup without being in range of the WiFi network at the LPG tank.
- The F100 creates a temporary WiFi network for Setup.
- You will need to know how to search for and connect to WiFi networks with a smartphone, tablet, or similar device. Setup requires Javascript.

For setup you will need:

- Network name and password of the WiFi network at the LPG tank.
- Email address reports will be sent to.
- Name assigned to the LPG tank.

Setup - Connect to the F100

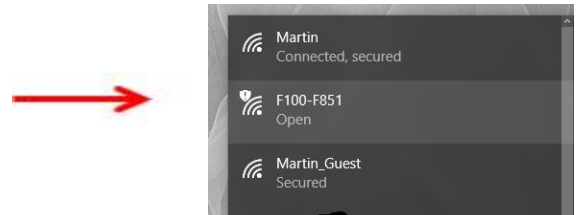
For Setup, the F100 will create a temporary WiFi connection with a WiFi enabled, web enabled, device like a smartphone or laptop. This temporary connection is used only for setup, the F100 will report over the WiFi network named in the setup process.

1) Press the push button for 4-5 seconds, then release.

Within 5 seconds the LEDs will begin to flash, indicating the F100 is broadcasting a temporary WiFi network (F100-xxxx).



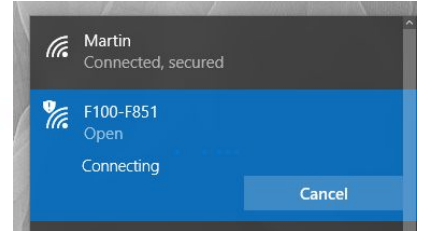
2) Search for available WiFi networks on your setup device (smartphone, tablet, laptop, or computer).



3) Select the F100 network. "F100-XXXX" (XXXX are the last 4 characters of the F100 serial number.) You may see a shield with an exclamation point next to the F100 network name. This is a normal part of the F100 network.



4) **Connect to the F100 network.** Click the Connect button.
The F100 does not need a network password.



5) **Open your web browser, type <http://192.168.10.1> in the address bar, and load the Configuration page.**

It is important to type <http://192.168.10.1> each time you visit the Configuration page.
Many web browsers will autofill the address bar, then load a cached page, with incorrect information.

6) You may find it handy to have this information at your fingertips -

Network Name: _____

Password: _____

F100 Configuration Page: <http://192.168.10.1>

Set up the F100

1) Add the Network Name and Password (PreSharedKey)

If you are in range of the WiFi network the F100 will report through, follow these steps:

- a) Scroll down to **WiFi Scan** and click the down arrow to see a list of detected network names.
- b) Select the network the F100 will report over. This will fill in the network name text box. Some WiFi routers support 2.5G and 5G networks. Select the 2.5G network
- c) If you do not see the network name you are not in the network range – proceed to “If you are not...”
- d) Scroll down one line to **PASSWORD** and enter the network password (PreSharedKey) in the text box. Proceed to **2**.

If you are not in range of the WiFi network the F100 will report over:

- e) Scroll down to **Network Name** and enter the network name in the text box
- f) Scroll down to **Password** and enter the network password (PreSharedKey) in the text box.

2) Security

If you selected a network from the list of detected networks in Step 1, the security type of the network will automatically be filled in.

Check this against the list of supported security types. If the security type is not supported, the WiFi network security type will have to be changed. This change is managed through the configuration page of your router, and is not part of the scope of F100 setup instructions.

3) Report Rate

The F100 is preconfigured to report once per day. (Report Rate value of 86400.) This is the report rate LevelCon recommends. To accept this, do nothing. Proceed to the next step.

For 2 reports per week enter 302400 in the textbox.

For 1 report per week enter 604800 in the text box.



4) Add the email address or addresses where reports will be sent

- a) Scroll down to **Email Recips.**
- b) Enter the email address reports will be sent to.
- c) For multiple addresses, separate each address with a single comma and no spaces, i.e.
jmitchell@levelcon.com,nomail@gmail.com.
- d) Some email services, like AOL and Verizon, mark LevelCon emails as spam and don't deliver them. The solution is to create an email account through gmail, and forward emails to your preferred email address.

5) Add Sensor Name

- a) Scroll down to **Sensor Name.**
- b) Enter the commonly used name of the tank. Like "Backyard Tank" or "North Lot Propane".

6) Save Setup entries and send a report

- a) Click on the **Save** button to save changes to the setup page and send a report.
- b) **A rapid "walk" of the three LEDs, where they light up one after the other in rapid succession indicates a successful report.**
- c) **Reporting is confirmed by the receipt of an email.**
- d) A simultaneous blink of the three LEDs, where all turn on and off at the same time then stop, indicates a report failure. Usually this means incorrect WiFi parameters.

7) Manual reports

- a) A single, quick depression of the push button will send a report. This also resets the timer. This method of reporting draws a lot of energy from the battery, and minimal use is recommended.



Notes:

1. WiFi network security types

WPA2 (AES) aka WPA2-PSK (AES)	Supported, Recommended Most secure, most common, newer
WPA2 (TKIP) aka WPA2-PSK (TKIP)	Supported, Not recommended except as required for legacy devices Less secure, not common, newer
WPA/WPA2 (TKIP+AES)	Not supported
WPA (AES) aka WPA-PSK (AES)	Supported, not recommended Less secure, not common, older
WPA (TKIP) aka WPA-PSK (TKIP)	Supported, not recommended Less secure, not common, older
WEP 128	Not supported
WEP 64	Not supported
WiFi descriptions with the word "Enterprise"	Security managed through RADIUS server. Not supported through consumer channels. Please contact MDi for enterprise support.

2. JavaScript. JavaScript is required for administering the F100.

3. Advanced button. The **Advanced** button reveals all possible set up parameters of the F100. LevelCon does not recommend using this option for normal consumer installations.

4. Restore Defaults button. The Restore Defaults button erases all entered values on the Configuration page and restores factory default values.

5. Battery life. You can expect at least two years of daily reporting from the F100 as shipped. The need to replace batteries is shown when:

- a) Previously regular reporting becomes irregular and the battery voltage in the last reports drops below 4.5V.
- b) Connections of the F100 to a local device for administration are dropped.

6. Operation. The F100 is "on" whenever batteries are installed. The F100 uses so little power when operating that an On and Off switch or capability is not useful.

7. SetUp Location. The F100 can be set up at a convenient kitchen table or workshop bench with a smartphone or similar device. Setup does not need to occur at the propane tank.

