

F100 Quick Start Guide

The F100 is a 802.11bgn enabled wifi telemetry device with a single analog input. This guide will outline the configuration and installation for a typical applications.

Device Configuration

The F100 is configurable through a self-broadcasting wireless network. Any wifi enabled device with a web browser can configure the F100 (iPhone,iPad, any Android device, laptop etc...) Follow the instructions below to set the F100 into the configuration mode and access parameters.

- 1. Press and hold the push button for 3-4 seconds and then release.
- 2. The lighted push button will begin a steady quick flash and the device should now be in configuration mode.
- 3. On a wifi enabled device (laptop, phone, tablet etc...) search for available networks.
- 4. An open network named F100-XXXX network should be visible (where XXXX are the last 4 characters of the F100's serial number)



5. Join the network, there is no password to join.



6. Open a web browser and navigate to: <u>http://192.168.10.1/</u> A configuration page will be shown as follows: LevelCon F100 Configuration

acri23291867		
Current Sensor Reading		
Aux Reading		
Digital lopur		
e gran rapar		
Counter		
Battery (mV)		
Wifi Scan:	Network Name (dBm)	
SSID	levelcon	
PSK		
Security	WPA2 •	
Report Rate(s)		
Report Mode	LevelCon •	
Email Recips		
Sensor Name	Propane Level	
Sensor Type		
Sensor Signal	0-5V •	
Sensor Knee		
Sensor Factor		
Sensor Wait(s)		
DI Alarm(s)		
Save		
Restore Defai		

Below is a description of the important user parameters. Other parameters are available for debug and advanced configuration.

Name	Description
Wifi Scan	Scan of available 802.11b/g/n networks. If selected the SSID and Security fields are automatically populated with the chosen network.
SSID	SSID is the name of the wifi access point the F100 will connect to
PSK	Pre-shared key for authenticating on wireless network, your network password
Security	Type of wireless security, most common and secure is WPA2
Report Rate(s)	Interval in seconds the F100 will report. For instance to report once a day, set to 86400



Report Mode	This should always be set to LevelCon unless instructed otherwise	
Email Recips	List of comma seperated email addresses to receive email reports	
Sensor Name	User configurable name of the sensor/channel that is reporting, only used in email reporting. Examples: • House temperature • Cabin Propane Level • Gasoline Tank 52	
Sensor Type	Type of sensor connected. This parameter is necessary for email reports to have calculated values. Please choose from the following:	
	 For propane and hall effect sensors, a percentage is usually desired. For this, please enter percent For pressure sensors please enter in this format: <max psi="">psi_<desired units="">. For instance if you are using a 15 PSI sensor and desire an inch report you would enter: 15psi_in</desired></max> For sonic/radar/lidar and other distance measuring sensors that measure in mm, follow this format: mm_<desired units="">. Remember to set the factor to -1 and the knee to the tank height in the desired units. For instance if you had a 300 inch tall tank with a sonic sensor, you would enter: mm_in as well as set a factor of -1 and knee to 300.</desired> For advanced users a value of raw can be used to report the 12 bit reading that ranges from 0-4096 	
Sensor Signal	Select either 0-5V or 4-20mA. Hall effect/propane sensors are 0-5V	
Sensor Knee	Offset to be applied to the calculated value. Only used for email reporting	
Sensor Factor	Factor to be applied to the calculated value. Only used for email reporting	
Sensor Wait(s)	Number of seconds to wait for sensor to settle before taking a reading. Most sensors will read well with a setting of 3 seconds. Sonic/Lidar/Radar sensors require 9 seconds to settle.	

Adjust parameters as desired. At the minimum *the ssid, password, and authentication type must be specified* or the F100 will not be able to send reports. When finished, click the save button and the device will restart and send a report. The LED will blink slowly indicating the device is running. After 15-20 seconds a final indication will be shown:

- A fast LED blink sequence indicates a successful report.
- A single long LED illumination indicates a report failure. Usually this means incorrect wifi parameters.

After confirming the F100 is reporting please follow your specific hardware installation according to your application.



Propane Monitor Instructions

You will only need a phillips head screwdriver to complete the installation.

- 1. Please complete the "Device Configuration" section before installing the equipment.
- 2. At the propane tank, remove the existing dial gauge by removing the two fastening screws.
- 3. Replace the original dial with the supplied dial and cable combination and fasten it to the tank with the supplied screws.
- 4. Insert the Chogori dial sensor lead in the receptacle on the monitor. <u>Be sure to properly line</u> <u>up the male and female components as to not bend any receiving pins.</u>
 - a. Once the connection is made, Twist the locking mechanism on the connector clockwise to lock it into place.
- 5. Place the F100 anywhere on the tank with the supplied magnetic feet.
- 6. Press the lighted report button once to force the initial report.



F100 Parts Description



Propane Dial Gauge w/ hall effect sensor



Chogori connector and receptacle



