User Guide SentryPlus Alert[™] Cellular Gateway

ATTS 001001001 - POWER - CELLULAR - IoT FLOOD RESET FL000 FL000 GND +12Vdd

SentryPlus Alert

Powered by Syncta



Table of Contents

Overview
Startup Sequence
LEDs
POWER
CELLULAR
loT
Startup
FLOOD
Buttons
RESET
TEST
PROG
Terminals
Troubleshooting
Poor or No Cellular Reception
POWER LED is Off
No Connection to the Cloud

Overview

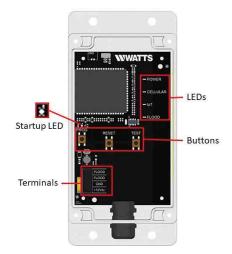
A WARNING



Read this Manual BEFORE using this equipment. Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment. Visit Watts.com with any questions. Keep this Manual for future reference.

This User Guide provides information about the different LED lights, buttons, and connectors inside the SentryPlus Alert Cellular Gateway, as well as troubleshooting suggestions if needed.

For more information about the Cellular Gateway, see the Installation, Operation, and Maintenance Manual.



Startup Sequence

When the Cellular Gateway powers up, the device goes through a startup sequence, which includes the Startup LED changing colors until it turns off. Below is the startup sequence that the device will go through if everything is working correctly. If the Startup LED blinks white for more than 30 seconds or if it blinks green for more than 10 minutes, refer to Startup in the LEDs section to troubleshoot the issue.

COLOR	STATE	DEFINITION
\bigcirc	White	Appears for a few seconds after the device is turned on.
\bigcirc	White blink - slow (5 sec)	The cellular radio is off; this is a normal state for five seconds.
	Green blink (30 sec - 10 min)	The device is searching for a cellular connection.
	Cyan blink - fast	A cellular connection has been established and the device is connecting to the Cloud.
	Cyan blink – slow	A Cloud connection has been established.
	Off	The device is operating normally.

LEDs

The LEDs inside the Cellular Gateway indicate if a component/connection is running, or if there is an issue. The following sections describe the different LED colors and blink patterns.

Power

The POWER LED turns on when power is supplied to the device.

COLOR	STATE	DEFINITION	SOLUTION
	Green	The device is turned on.	N/A
	Off	If the device is plugged in, but this	The +12Vdc and GND wiring could be
		LED is not on, the device is not	reversed. See POWER LED is Off on
		receiving power.	page 8.

LEDs (continued)

Cellular

 COLOR
 STATE
 DEFINITION
 SOLUTION

 Blue
 A cellular connection is present.
 N/A

 Blue blink
 The cellular connection is poor.
 See Poor or No Cellular Reception on pages 7-8.

 Off
 There is no cellular connection.
 See Poor or No Cellular Reception on pages 7-8.

The CELLULAR LED indicates whether or not a cellular connection is present.

loT

The IoT LED indicates whether or not there is a connection to the Cloud.

COLOR	STATE	DEFINITION	SOLUTION
	Blue	There is a connection to the cellular service provider's cloud.	N/A
		There is not a connection to the cellular service provider's cloud.	See No Connection to the Cloud on page 12.

Startup

The Startup LED only operates when the device is starting up.

COLOR	STATE	DEFINITION	SOLUTION
\bigcirc	White blink - slow (+30 sec)	There is likely an issue with the device's firmware.	Replace the device. Contact Syncta's Customer Support team at 888-725-4285.
	Green blink (+10 min)	No cellular connection is available in this location.	See <u>Poor or No Cellular Reception</u> on pages 7-8.
	Off	The device is operating normally.	N/A

Flood

The FLOOD LED only turns on when excessive relief valve discharge from your backflow assembly is detected.

COLOR	STATE	DEFINITION	SOLUTION
	Orange	Water is discharging from the relief valve of your backflow assembly, and it is more than a slight drip. Note: This will only turn on if water discharge is detected.	If your device is registered, you will receive a "flood notification" via text, email and/or a phone call.
	Off	There is no discharge occurring.	N/A

Buttons

The only button you might need to use is the RESET button. See the section below for more information.



RESET

Press this to reset the Cellular Gateway and restart the device. This will cause all ongoing operations to cease.

Note: You can also perform a full reset by unplugging the Cellular Gateway for 10 seconds and then plugging it back in.

TEST

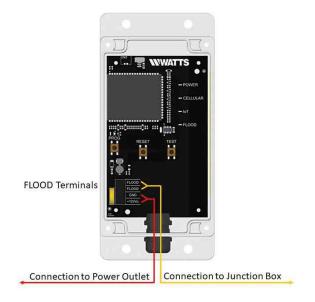
This is for internal use only; do not press this button.

PROG

This is for factory use only; do not press this button.

Terminals

The FLOOD terminals connect the Cellular Gateway to the Junction box. The GND/+12Vdc terminals connect the Cellular Gateway to a power outlet.



Troubleshooting

This section provides troubleshooting solutions to the most common issues if your Cellular Gateway is not working correctly. If you are unable to resolve your issue, contact your local Watts representative to order a replacement device.

Poor or No Cellular Reception

Poor or no cellular reception will cause notifications to not work. As noted in the Installation, Operation and Maintenance Manual, the installation location is important for cellular reception. If the CELLULAR LED is OFF or blinking, the most likely issue is poor reception. If the device is still not working, review the possible causes and solutions below.

Possible Cause 1

The location where the antenna is installed may be interfering with cellular reception.

Note: Care should be taken to ensure that the antenna side of the device is installed away from any walls, wires, pipes, or other obstructions, particularly anything metallic.



Solution 1

Move the Cellular Gateway to a location where the antenna is not facing any internal walls, wires, pipes, or other obstructions, such as an electrical box.

Possible Cause 2

The location has poor cellular reception.

Solution 2

Move your Cellular Gateway to a different location and check to see that the CELLULAR LED is solid blue; if it is not, move the device until you find a location with better cellular reception.

Note: You can install the Cellular Gateway up to 100 feet away from the Junction Box. Six feet of wire is supplied with the Cellular Gateway. If additional wire is used, it must meet the required rating for the Junction Box (300V, 16-24 AWG).

Please consider the following before installing the Cellular Gateway outdoors:

- If the unit is installed outdoors, additional precautions may need to be taken to ensure the wire entry at the bottom of the node is adequately sealed (with silicon or something similar) to prevent water intrusion.
- Do not install in direct sunlight.
- Depending on the geographical location, condensation buildup inside the enclosure is a concern.

Possible Cause 3

Cellular reception might not be supported at your site.

The Cellular Gateway operates using 3G technology on band 2 or 5. Mobile phone reception is not a reliable indicator of expected signal strength for the Cellular Gateway.

Solution 3

If you cannot find cellular reception anywhere at your site, you may not have carrier coverage at your site. Contact Syncta's Customer Support team at 888-725-4285 for more information.

POWER LED is Off

If the POWER LED is off, make sure the Cellular Gateway is plugged in and that the power outlet is active. If the device is still not working, review the possible cause and solution below.

Possible Cause

If the Cellular Gateway is plugged in and the POWER LED is off, the +12Vdc & GND wiring inside the Cellular Gateway might have been accidentally swapped.



Solution

Use the instructions on the next several pages to swap the +12Vdc and GND wiring inside the Cellular Gateway.

A WARNING



Ensure that you unplug power to the Cellular Gateway before making any wiring changes inside the device. Failure to do so may result in electrocution, personal injury, and / or death.

- 1. Unplug the power cord connected to the Cellular Gateway.
- 2. Using a #2 Phillips head screwdriver, remove the four screws that secure the cover of the Cellular Gateway; set them aside.



3. Carefully remove the cover and place it aside.



4. Using a small flathead screwdriver, loosen the two bottom screws that connect the GND and +12Vdc wiring to the terminals.



5. Once the screws are loose enough, carefully remove the wires by gently pulling them away from the terminals; note which wire went into which terminal and reverse them.



6. Carefully insert the reversed wires into the terminals; you might need to hold the wires in place and tighten the screws at the same time.



- 7. Ensure the screws are tight enough to keep the wires in place.
- 8. Place the cover back on the Cellular Gateway, ensuring that the rubber seal remains in place, paying special attention to each corner near the screw holes.



9. Using a #2 Phillips head screwdriver, reinstall the four screws that secure the cover of the Cellular Gateway.



- 10. Plug in the power cord connected to the Cellular Gateway.
- 11. Turn the Cellular Gateway on and wait for it to power on; if the POWER LED is still off, contact Syncta's Customer Support team (support@syncta.com or 888-725-4285).

No Connection to the Cloud

If the IoT LED is off, there is no connection to the cellular service provider's cloud. If the device is not working, review the possible cause and solution below.

Possible Cause

There is a disruption in service between the Cloud and the Cellular Gateway.

Solution

Contact Syncta's Customer Support team (support@syncta.com or 888-725-4285) to confirm if the issue is specific to your Cellular Gateway or to the cellular service provider.

Limited Warranty: Watts (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE COMPANY HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication, improper installation or improper maintenance or alteration of the product.

Some States do not allow limitations on how long an implied warranty lasts, and some States do not allow the exclusion or limitation of incidental or consequential damages. Therefore the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may have other rights that vary from State to State. You should consult applicable state laws to determine your rights. SO FAR AS IS CONSISTENT WITH APPLICABLE STATE LAW, ANY IMPLIED WARRANTIES THAT MAY NOT BE DISCLAIMED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL SHIPMENT.



USA: T: (978) 689-6066 • F: (978) 975-8350 • Watts.com Canada: T: (888) 208-8927 • F: (905) 332-7068 • Watts.ca Latin America: T: (52) 55-4122-0138 • Watts.com