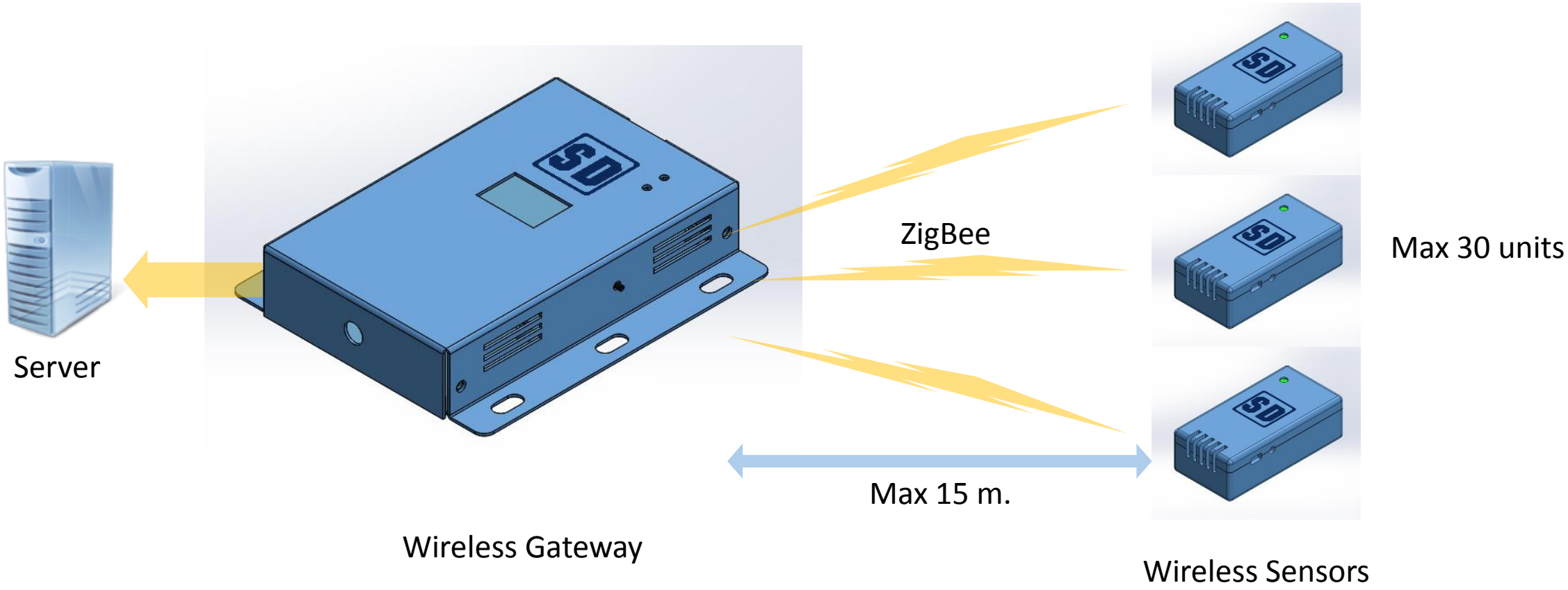
SD Wireless Temperature Sensor and Gateway

Connect & Disconnect Operations

20/12/2016

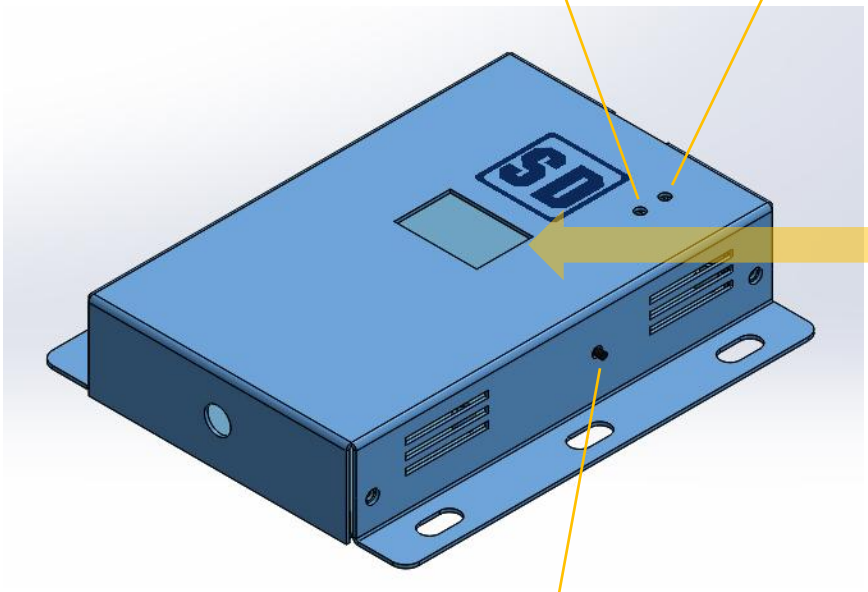
Wireless Gateway & Sensor



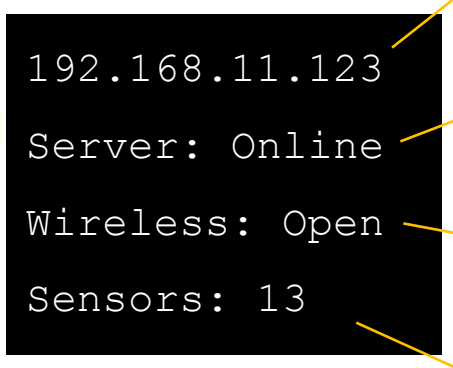
Wireless Gateway OLED Display

LED (Green): Blink when receive data from sensors

LED (Orange): Server Connection
Blink: Connecting/ On: Connected



Open/Close New Connection Push Button



OLED Display

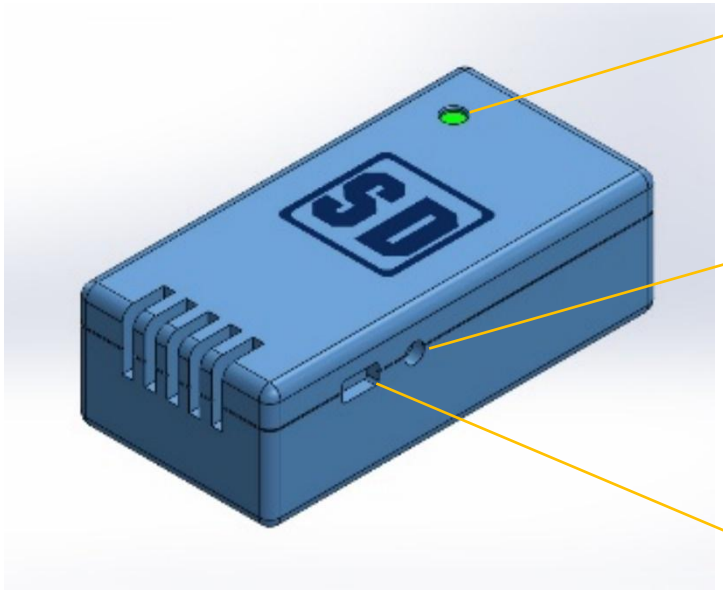
Gateway IP Address

Connection to Server Status (Online/Offline)

New Sensor Connection Status (Open/Close)

Number of Connected Wireless Sensor

Wireless Sensor Switch & Push Button



Connection Status LED

Connect/Disconnect
Push Button

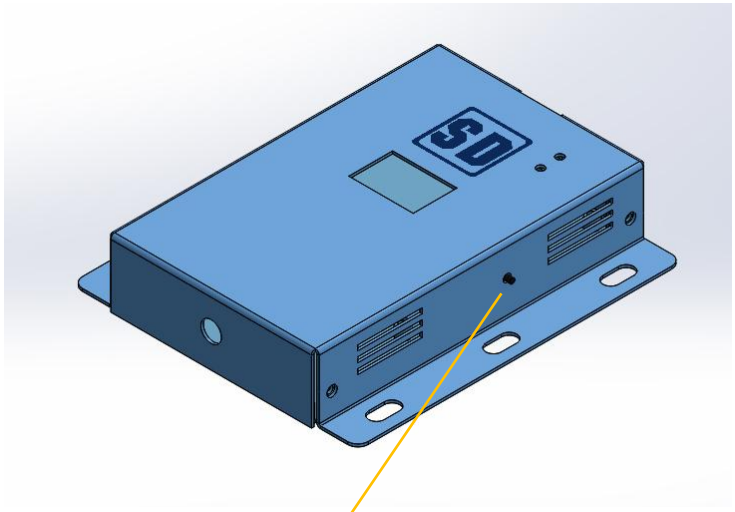
Power On/Off Switch
(Slide Type)

Open the GW for new connection from sensor

Method 1:

- Use web browser to access the web server on the GW and login with admin username & password.
- Click “Wireless Information” on the right menu.
- Click the Enable button at the bottom of the page to open the connection for new sensor. The OLED on GW shown “Wireless: Open”
- Click again to disable (close) the connection. The OLED on GW shown “Wireless: Close”
- If the connection is opened for 30 minutes, it will be closed automatically.

Open the GW for new connection from sensor



Method 2:

- Push the “Open/Close Connection Button” on the GW to open the connection for new sensor. The OLED on GW shown “Wireless: Open”
- Push again to close the connection. The OLED on GW shown “Wireless: Close”
- If the connection is opened for 30 minutes, it will be closed automatically.

Add new wireless sensor to GW

1. Open the GW for new connection from sensor by pushing the “Open/Close Connection Button” on the GW, or clicking the “Enable” button in GW Web page. The 3rd Line of OLED display of GW shown “Wireless: Open”
2. Push “Connect/Disconnect Push Button” on the new wireless sensor. The sensor will try to connect the nearest GW that is opening for new connection.
3. The LED lamp of sensor will blink. The colour of the LED indicates the result of the connection.
   - Green: Successfully connect and send the data to GW.
   - Orange: Successfully connect but cannot send the data to GW.
   - Red: Cannot connect to the GW.

Reconnect wireless sensor to last connected GW

If the sensor was connected to the GW once and then power off GW or sensor. You can reconnect the sensor to the GW as followings:

1. Power On the sensor and GW. The sensor will try to connect to the last connected GW automatically.
2. In case the sensor cannot connect to GW, you can retry to connect by pushing “Connect/Disconnect Push Button” on the wireless sensor. The sensor will try to send data to the last connected GW again.
3. The LED lamp of sensor will blink. The colour of the LED indicates the result of the connection.
   - Green: Successfully send the data to GW.
   - Orange: Cannot send the data to GW.

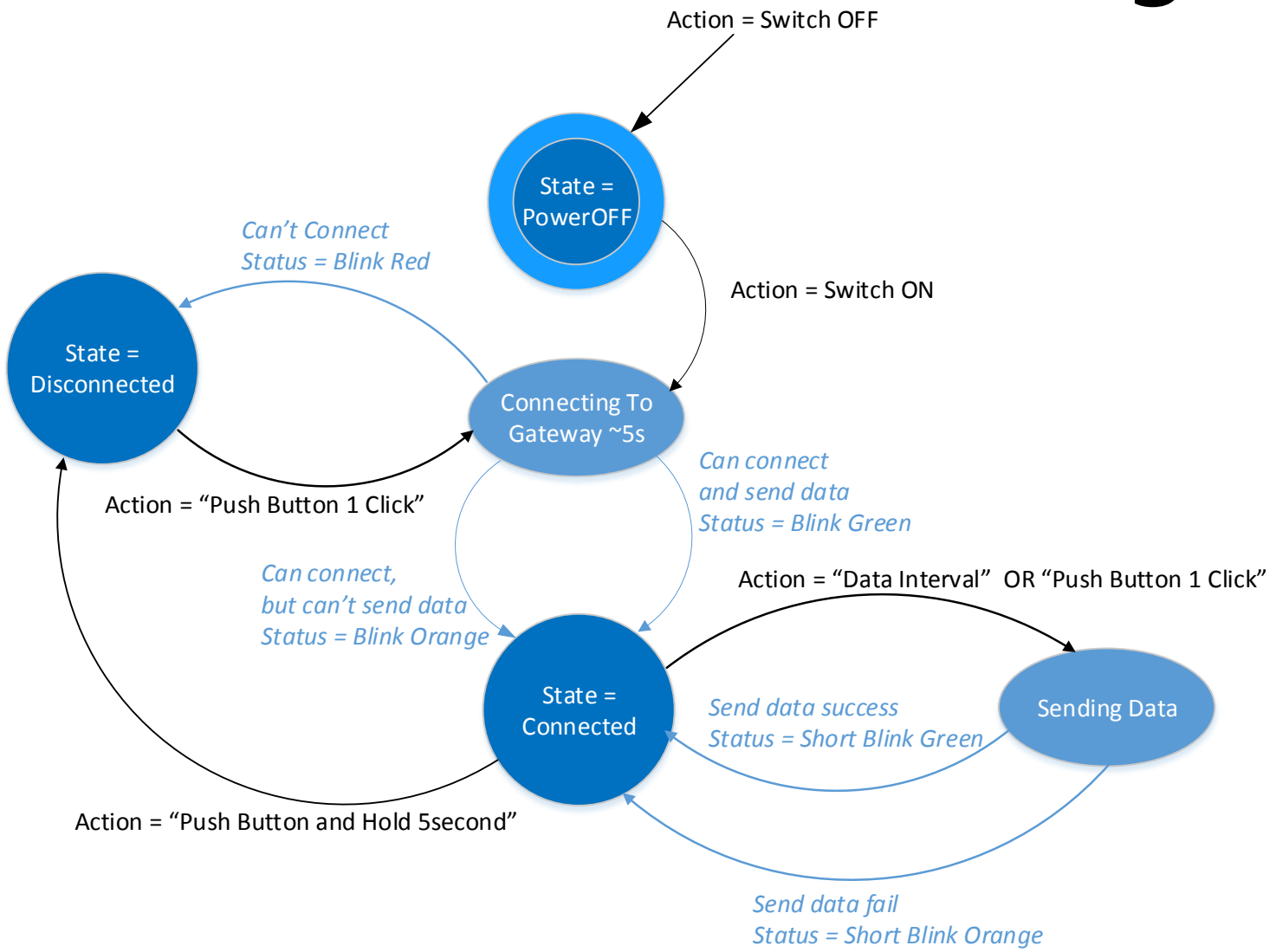
Disconnect wireless sensor from GW

1. Push “Connect/Disconnect Push Button” on the wireless sensor and hold for 5 seconds. The sensor will try to disconnect from the GW.
2. The LED lamp of sensor will blink in Red colour to show that it was already disconnected from the GW.

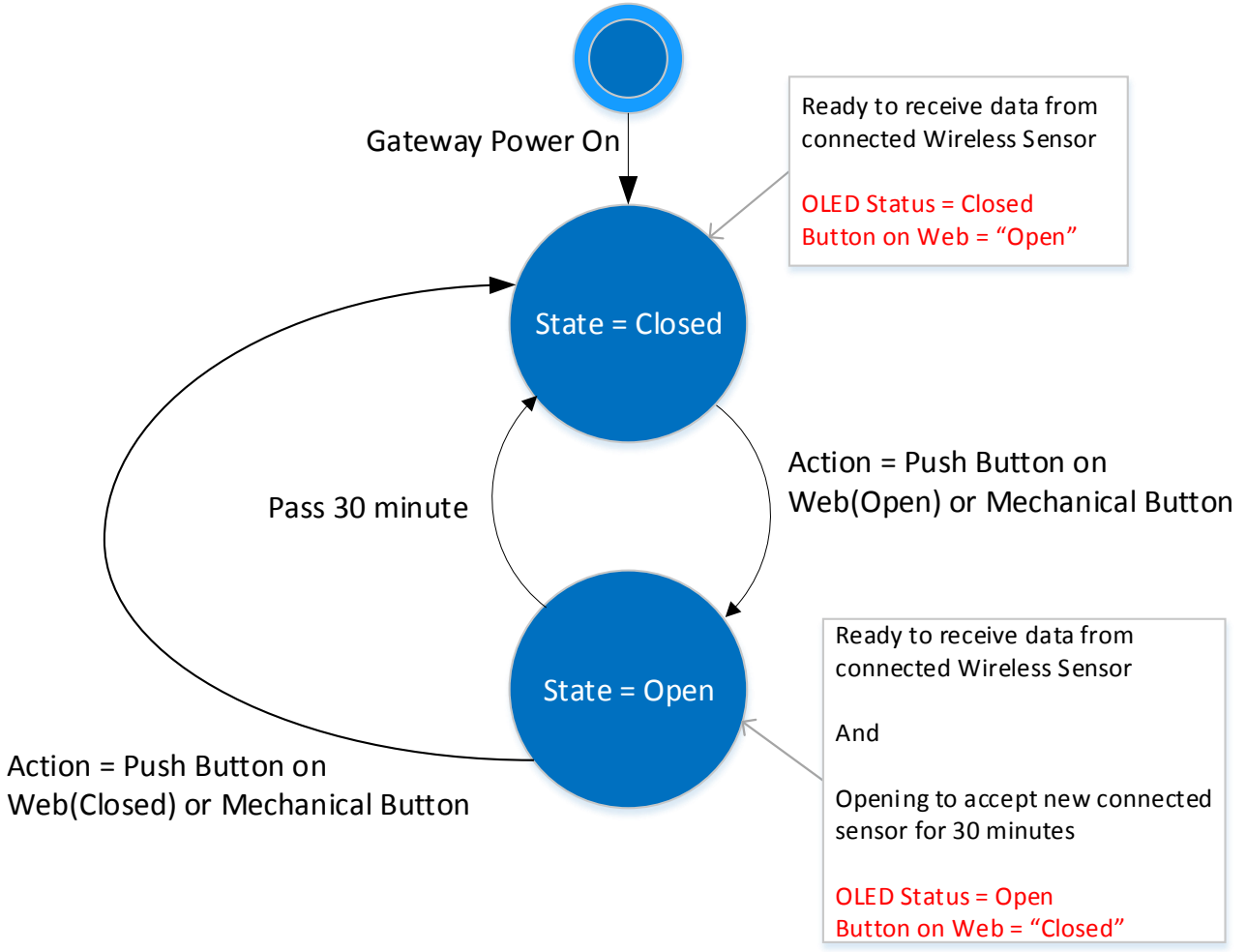
Wireless Sensor: Summary Status Table

Current State	Action	Description	LED Status		Next State
Power OFF	-	Sensor power OFF			
Power OFF	Switch ON	Connecting to Gateway	Blink Green	Connected and Send data success	Connected
			Blink Orange	Connected, but can't send data	Connected
			Blink Red	Can't connect with Gateway	Disconnected
Connected	Data Interval Or Push button 1 click	Sending Data	Blink Green	Connected and Send data success	Connected
			Blink Orange	Connected, but can't send data	Connected
	Push button and hold 5sec	Disconnect from Gateway	Blink Red	Disconnect	Disconnected
Disconnected	Push button 1 click	Connecting to Gateway	Blink Green	Connected and Send data success	Connected
			Blink Orange	Connected, but can't send data	Connected
			Blink Red	Can't connect with Gateway	Disconnected

Wireless Sensor State Diagram



Gateway State Diagram



- NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These
- limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can
- radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio
- communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful
- interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the
- interference by one or more of the following measures:
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- - Reorient or relocate the receiving antenna.
- - Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help
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- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.