SoluM ESL Gateway

User Manual

(SLG-CS101)

Document Summary

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Revision History

Rev.	Date	Remark
1.0	1.11.2017	First Edition.

Contents

1. Precautions

"This RF device operates on the 902-928MHz frequency band and c an produce radio interference. The device, ther efore, may not be used for applications w here safety of human lives is concerned."

1) Usage Environment

Take extra caution when using this RF device in the vicinity of other electronic devices and appliances. Most electronic devices and appliances use electromagnetic waves. Electromagnetic waves emitted by this RF device can affect other electronic devices and appliances.

If using the device in an explosion hazard area, follow all safety regulations, instructions, and signals.

2) Storage and Use

Moisture and liquids can damage internal parts and circuit boards if allowed to enter into the device itself.

Do not place or store the product on a sloped surface. The product may slide and fall off the surface and damage.

Use the product in temperatures ranging from -25℃ to +60℃. Parts and circuits may damage if used or stored under temperature extremes.

Avoid areas with strong magnetism or subject to magnetism.
Contact between the device and a magnetic object can lead to malfunctions.

Do not place the product near heat-producing kitchen appliances like a stove or a microwave or in the vicinity of highly pressurized containers.

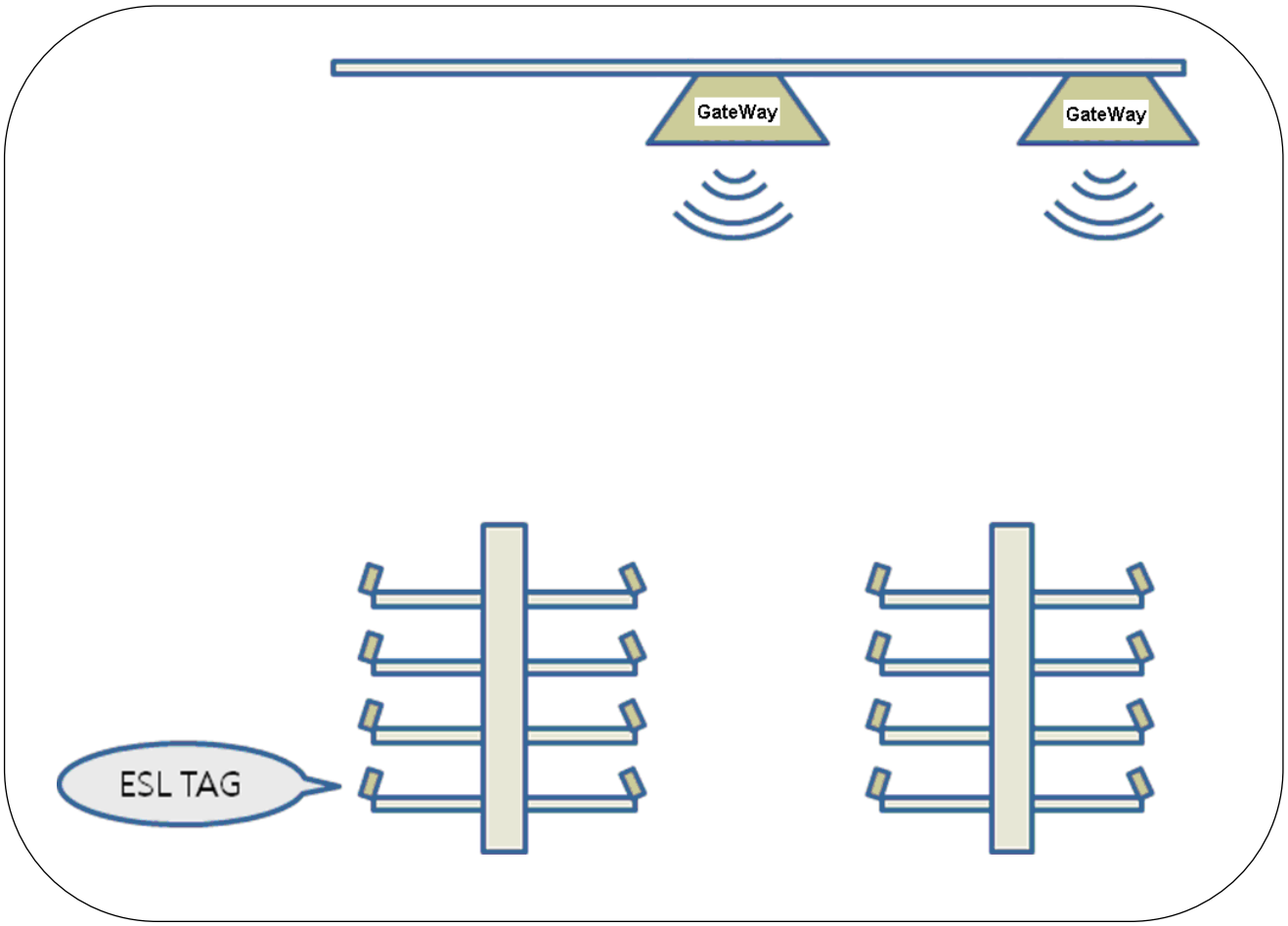
External impact to the product, such as from being dropped, can damage the screen.

Twisting and bending the product can damage the exterior casing and the internal components.

2. Overview

Gateway make up a system the electronically displays price and other product information that are traditionally shown printed or written on paper in places like the supermarket.

Here, ESL Gateway receives product price updates from the server and uploads the new data to the applicable electronic tags (ESL Tag), changing the displayed price information.



<Diagram 1> ESL System

3. Product Specifications

3.1 General Specifications

3.1.1. Gateway

General	
Communication	Ethernet (10/100/1000Mbps) RF(based on IEEE 802.15.4)
Dimension (W*H*D)	215 * 215 * 44 (mm)
Weight (g)	1,385g
Enclosure	Plastic (ABS)
Power	DC (5V,2A) or PoE (Power over Ethernet(IEEE802.3af))

Caution : DC Power Supply or PoE(Power over Ethernet) using one

3. 2 RF Specifications

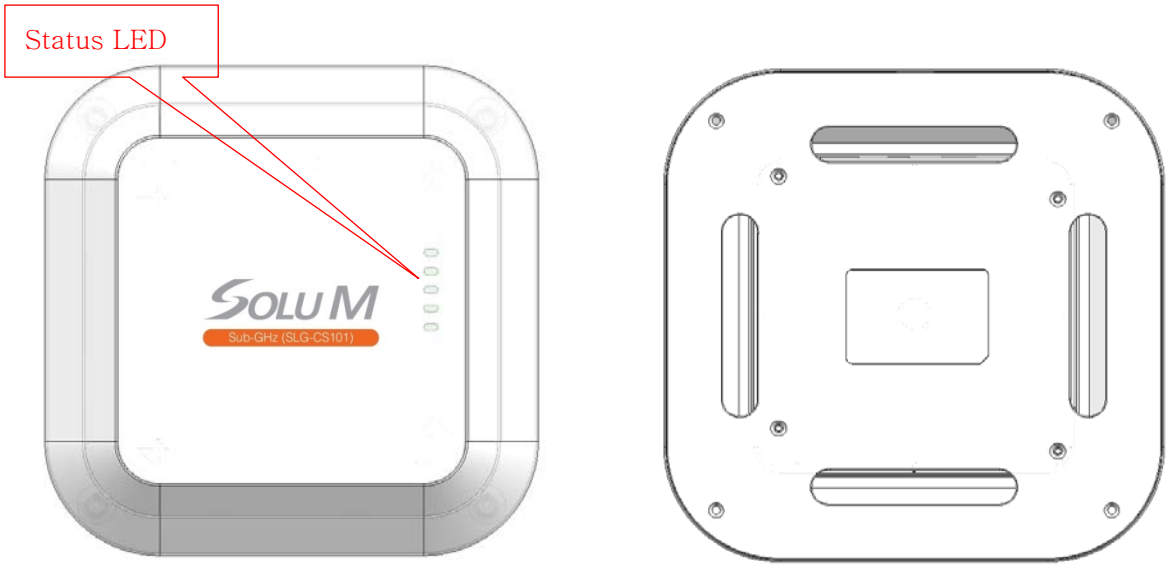
3.2.1 Gateway

Category	Specification	Note
Antenna Type	Internal Antenna	2ea
Transmit Frequency	~ MHz	
Receive Frequency	~ MHz	
Antenna Peak gain	dBi	
Modulation	2-GFSK	
Channels	64ch	
Operating Temperature	0℃ to +40℃.	
Power	■ DC (5V, 2A)	
	■ PoE (Power over Ethernet (IEEE802.3af)) 1) Input Voltage Range :36~57VDC 2) Nominal Input Voltage : 48VDC 2) Output Voltage : 5VDC±3%	

4. Product Description

4-1 Exterior

4.1.1 Gateway



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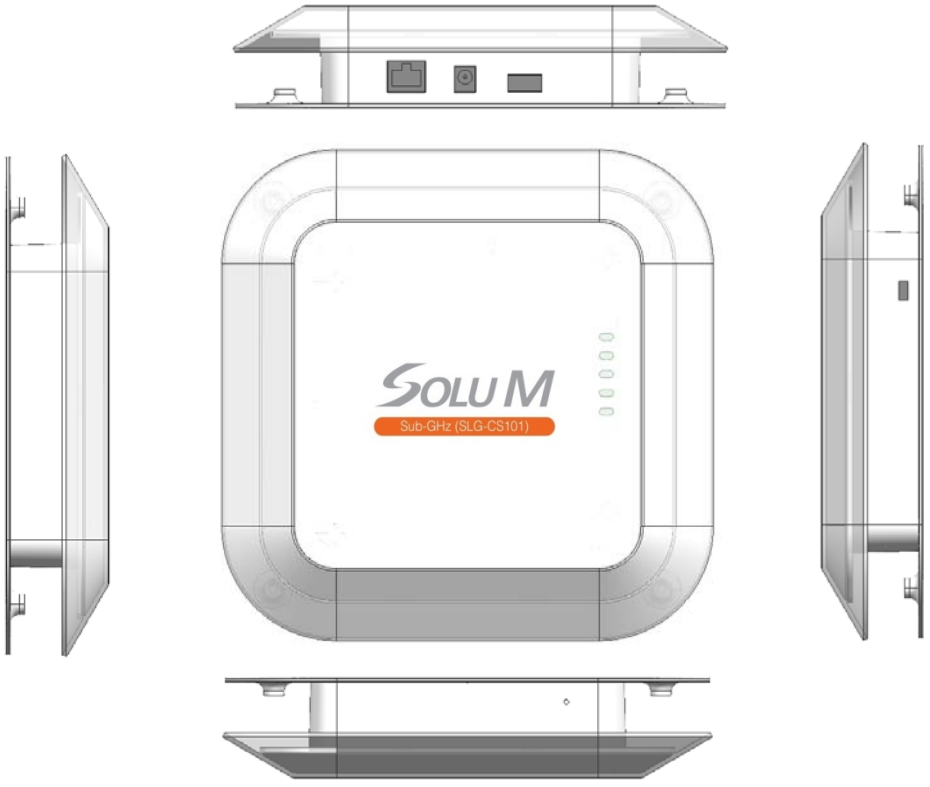

WARNING : This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

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.

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:

- 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.

Caution

This device complies with FCC radiation exposure limits for an uncontrolled environment. Avoid operating this device at a distance less than 20cm from the user