Manuals+ — User Manuals Simplified.

SOLUM SLG-EN101U ESL Gateway User Manual

SoluM ESL Gateway User Manual
SLG-EN101U

Contents

SLG-EN101U ESL Gateway

SoluM E-Label Platform
REV1.1
[PMN(Product Marking Name) : ESL Gateway]
[FVIN(FirmwareVersion Identity Number: V1.0] SoluM
08-31-2020
SUMMARY
This documentation is intended as a guide for the usage and installation of the SoluM ESL Gateway.
© 2020SoluM. All rights reserved
The names of actual companies and products mentioned herein may be the trademarks of their respective owners.
No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the express written consent of SoluM.
This document is subject to change without notice.

DOCUMENT HISTORY

Rev.	Date	Revision history
1.0	Aug31, 2020	First Edition

Preface

1.1 About This Guide
This guide introduces the end-user to the SoluMESL (Electronic Shelf Label) Gateway and provides explanations for the usage and installation of the Gateway with accompanying images.

1.2 Audience
This guide is intended for any user (store managers, associates, installers, etc.) properly authorized to operate and install company equipment.

1.3 Abbreviations and Acronyms

Terminology/Abbreviation	Description
ESL	Electronic Shelf Label
GW	Gateway
RF	Radio Frequency
IT	Information Technology
SMPS	Switch-Mode Power Supply
TBD	To Be Decided

Overview

The SoluM ESL (Electronic Shelf Label) Gateway is a crucial centerpiece inthe overall ESL System that electronically displays the price and other product information, which are traditionally printed or written on paper in places like the supermarket.
In the ESL System, the Gateway receives product or price updates from the server and uploads the new data onto the corresponding electronic shelf label tags (or ESLTags), changing the displayed product or price information.
An example of a typical Gateway and ESL tag setup can be seen in **Figure 3.1.**
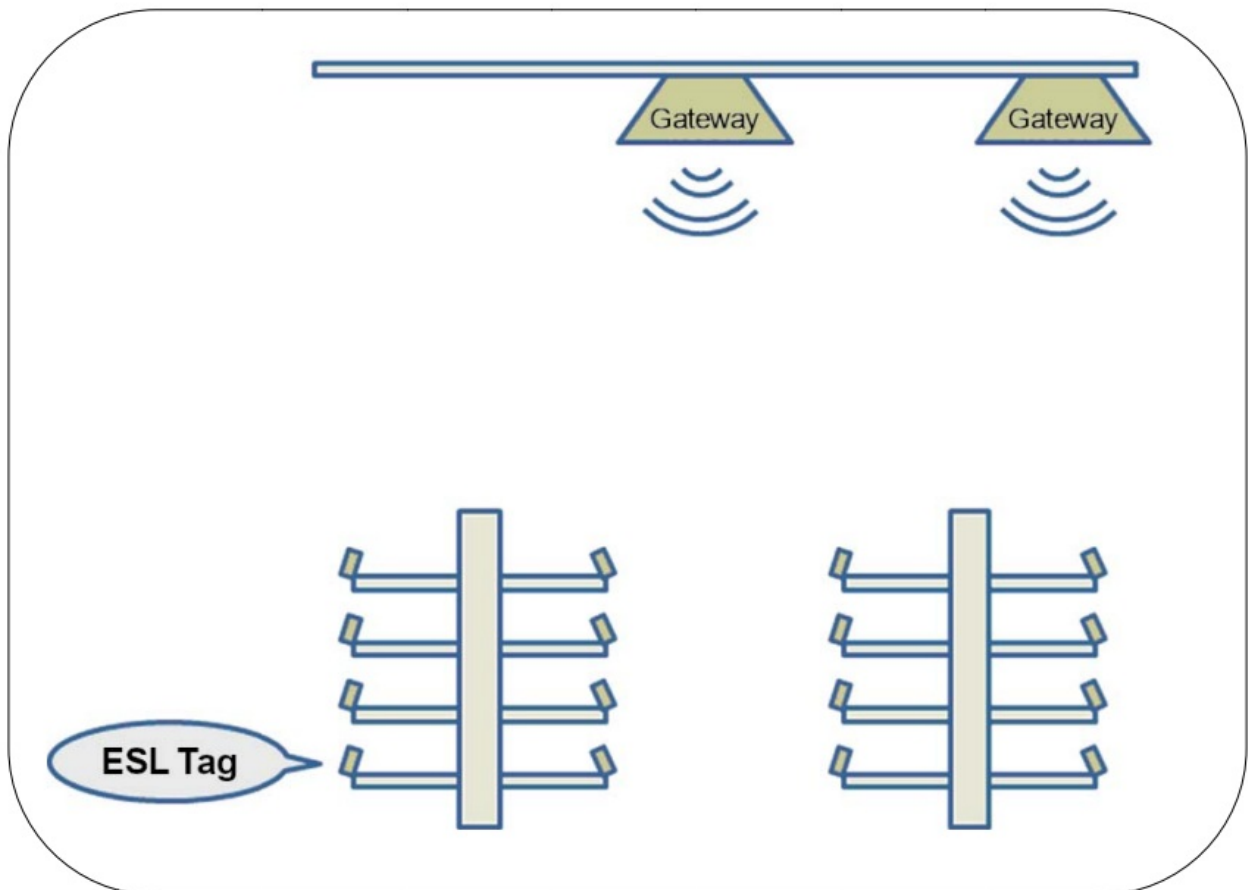
Figure 2.1. ESLSystem

Product Specifications

3.1 Gateway General Specifications

General	
Communication	Wireless (2.4GHz ISM Band)
Dimension (Width x Height x Depth)	7.799 x 1.181 x 0.535 (in) 198.1 x 30.0 x 13.6 (mm)
Weight	Product: 0.1437 lbs // 65.2g ~~Packing: 2.513lbs // 1,140g~~
Enclosure	Aluminum : Upper Case Plastic (ABS) : Lower Case
Input Power	USB DC Input (5V,5W)

3.2 Gateway RF Specifications

Category		Specification	Note
2.4GHz RF	Antenna Type	2.4Ghz External Antenna	2EA
		Internal Antenna	1EA
	Frequency Band (Tx, Rx)	2402MHz ~ 2480MHz	
	Antenna gain	**External:** 3.2dBi **Internal:** 2.05dBi	Peak gain
Operating Temperature		32°F to 104°F // 0°C to 40°C	
Power		• **DC Input (USB A-type)** • Input Voltage Range: 5VDC • Input Power: 5W	

Product Description

4.1 Gateway Exterior
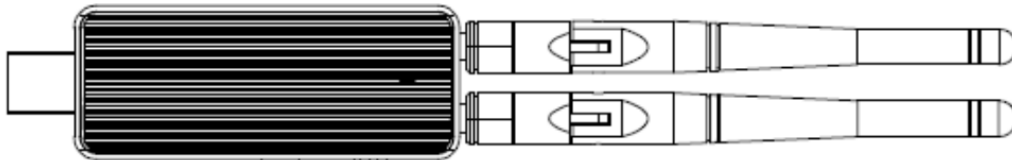
Figure 4.1. Top

Figure 4.2.Side

Product information is indicated on the sticker label of the S-Labels. The information consists of MODEL (model name), MFD (manufacturing date), S/N (serial number), MAC (MAC address), CE certification mark, FCC ID, and Manufacturer (SoluM).

KC : R-R-SLU-SLG-EN101U
FCC ID : 2AFWN-SLG-EN101U
IC : 22800-SLGEN101U
S/N :

XXXXXXXXXXXXXX

EGU200NA0X/WWW
Model : SLG-EN101U
MFD : APR.17.2019

MADE IN VIETNAM
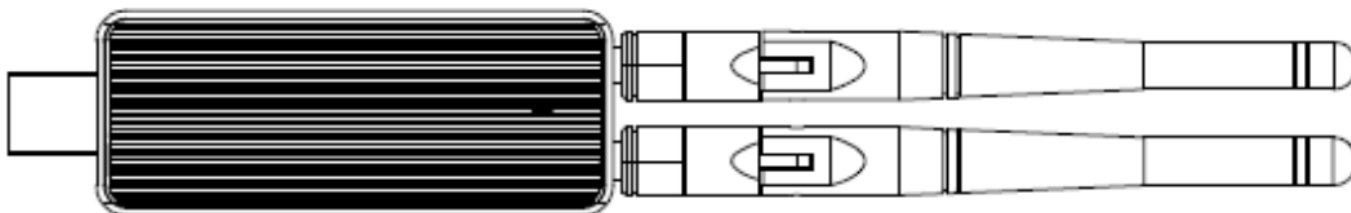
4.2 Status

Check

1. Network LED
2. 2.4G SIL LED
3. 2.4G TML LED
4. SubG SIL LED
5. SubG TML LED

After the Gateway is powered on by plugging in either an ethernet Cable with PoEora SMPS Power Adapter (with

an Ethernet Cable), LED status lights will turn on or blink depending on the current state.

1	Network	ON if Ethernet link is connected GW checks every1sec. whether the Ethernet link is connected.
2	2.4GHz SIL	Blinks (1 sec. duration) if the Server interface layer is operational. GW checks the operation of the Server interface layer
3	2.4GHz TML	Blinks (3sec.duration) if the RF MODEM is operational. GW checks the operation of CONFIDENTIAL the RF MODEM interface layer
4	Sub GHz SIL	Blinks (1sec.duration) if the Server interface layer is operational. GW checks the operation of the Server interface layer

		Figure 4.2. Gateway LED
		Blinks (wakeup order duration) if the RF MODEM layer is operational. GW checks the operation of the RF MODEM interface layer

Precautions

This RF device operates on the 2.4GHz frequency band and can produce radio interference. The device, therefore, may not be used for applications where the safety of human lives is concerned.
5.1 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.
5.2 Storage and Use

- Moisture and liquids can damage internal parts and circuit boards if allowed to enter 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.
- Store the product in temperatures ranging from -13°F to +140°F (-25°C to +60°C).
- Parts and circuits may damage if used or stored in extreme temperatures.
- 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 being dropped, can damage the product.
- Twisting and bending the product can damage the exterior casing and the internal components.

5.3 FCC
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 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 CONFIDENTIAL 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.
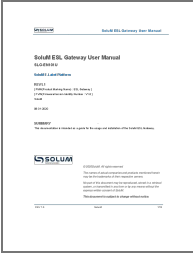
IMPORTANT NOTE:

FCC RF Radiation Exposure Statement

This equipment corralies with FCC RF radiation exposure lirrits set forth for an uncontrol of led environment. This equivalent should be inst al led and operated with arrinimumdi stance of 0. 5 centi meters but ween the radiat or and your body. This transmitter must not be co-located or operating in conjunction with any of her antenna or transmitter.

5.4 IC Information to User

This device complies with Industry Canada's license-exempt RSS. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Documents / Resources

	SOLUM SLG-EN101U ESL Gateway [pdf] User Manual SLG-EN101U, SLGEN101U, 2AFWN-SLG-EN101U, 2AFWNSLGEN101U, SLG-EN101U ESL Gateway, SLG-EN101U, ESL Gateway