Semi Passive LED Tag 100x30x9mm Data Sheet

EM4325, RAIN RFID Tag, ISO 18000-63 (Gen2) & 18000-64 (Total) Compliant

Feature

- The Semi Passive LED Tag 100 x 30 x 9mm
- ISO 18000-63 (Gen2) & 18000-64 (Total) compliant
- Operating in global frequency range of 860-960 MHz
- Using EM4325 IC with 4096 bits EEPROM
- Superior communication distance
- Stable product reliability and performance
- Operating Temperature: -30 °C ~ +60 °C
- Storage Temperature: -20 °C ~ +60 °C

Applications

- Inventory management
- Asset tracking
- Logistics

General description

UHF LED Tag 100*30*9mm is developed as a standard UHF Tag and targeted for Internet of Thing data-transmission applications such as management of inventory, locker and luggage …etc.. Semi Passive LED Tag 100*30*9mm is operating at 860-960 MHz, Ultra High Frequency RFID standards, with IC EM4325.

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1 Specifications

Product Specification	
Product name	**Semi Passive LED Tag**
Brand name	**SAG**
Model name	**481100627**
Electrical Specification	
Integrated Circuit (IC)	**EM4325**
Communication Standard	**ISO 18000-63 (Gen2) & 18000-64 (Total) Compliant**
Operating Frequency	**Global band: 860~960MHz**
EEPROM Memory	**4096 bit**
Physical Specification	
Product Size	**100 x 30 x 9 mm**
Environmental Specification	
Operating Temperature	**-30°C to 60°C** 〔1〕
Storage Temperature	**-20°C to 60°C, Humidity 45% RH to 85%RH**
Battery Specification	
Battery type	**User-replaceable CR2032, 3 volts**

〔1〕IC Operating Temperature.

2 Block Diagram

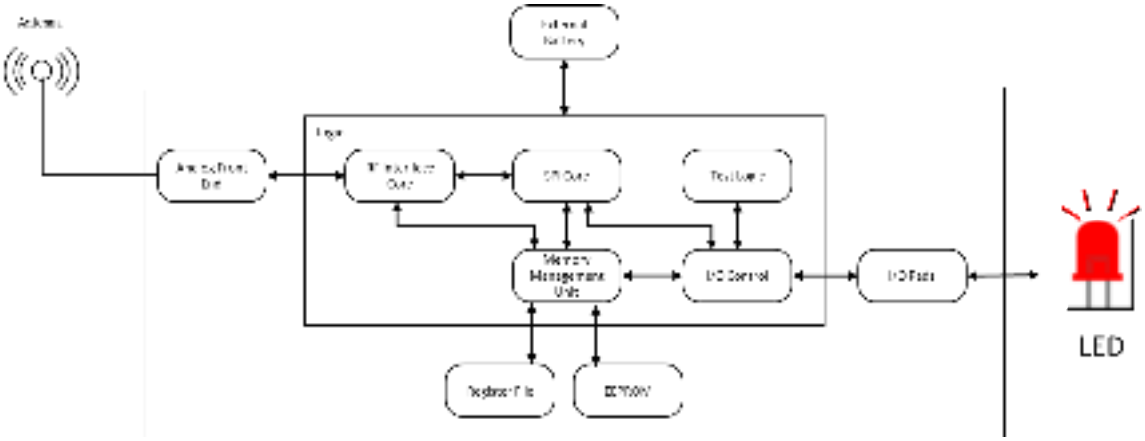

Figure 1. Semi Passive LED Tag Block Diagram Illustration

3 Layout and dimensions

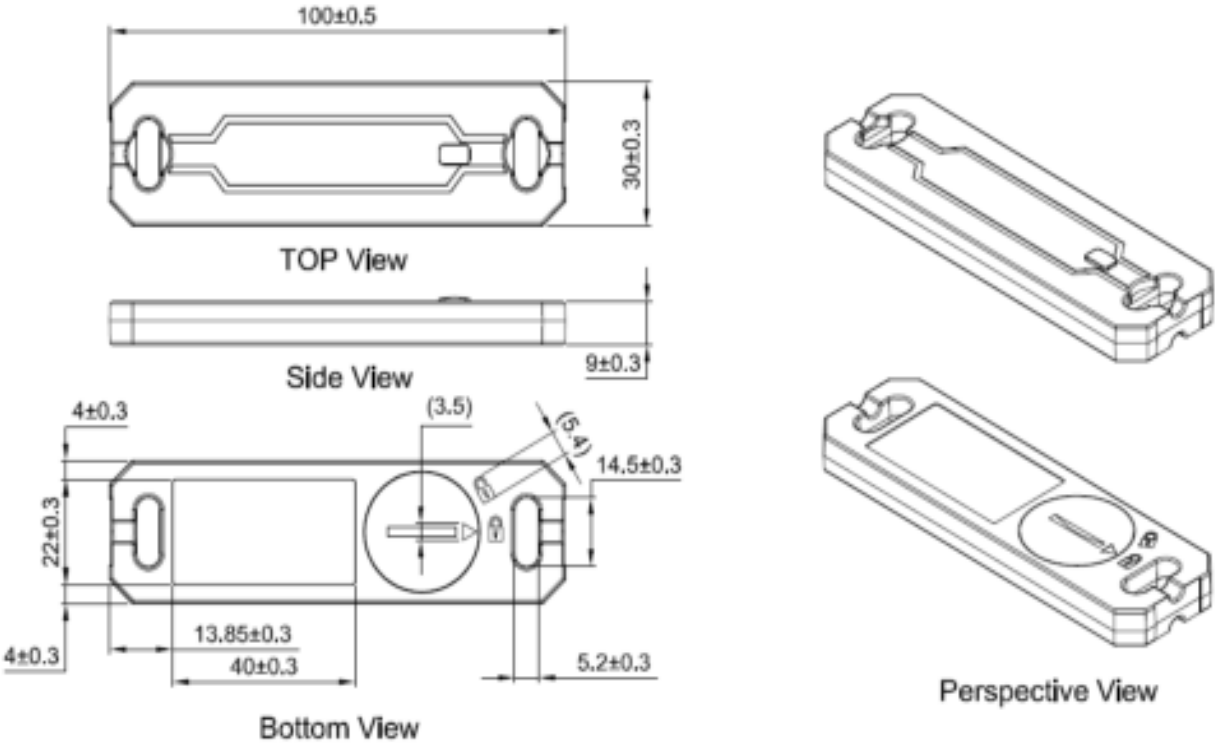

Figure 2. Layout and Dimensions of Semi Passive LED Tag

4 Communication Performance

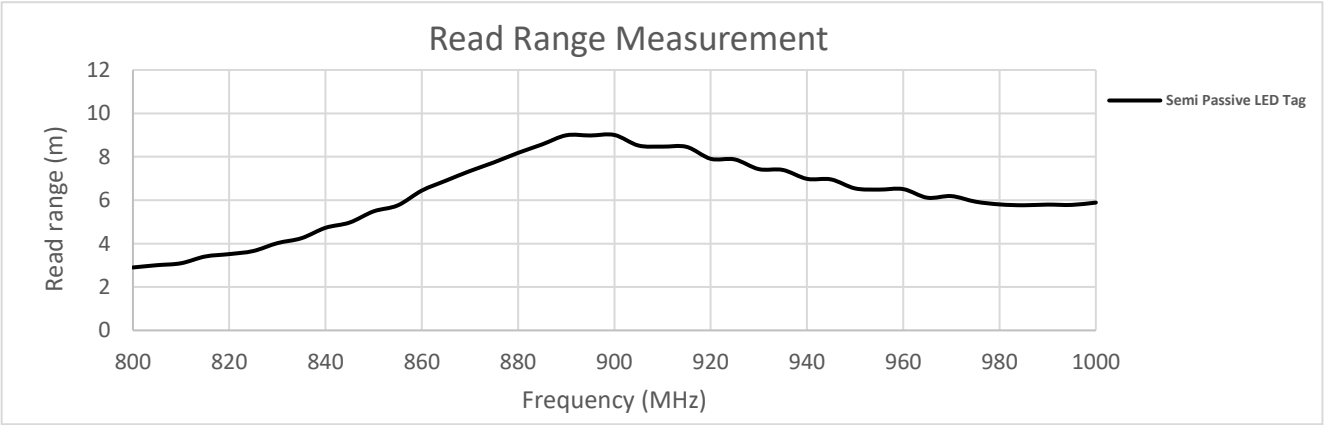

Figure 3. Maximum reading range measurement of turn on/off LED by Reader

5. Product Instructions

1. Checking the battery whether it attached in the product, please remove the isolation sheet before using.
2. The EPC number of tag are managed through scanning the QR code of tag.
3. Select the specified tag that you want to find.
4. Through the UHF reader to turn on the target's LED for searching.

Ideal application example: Shelve and box searches

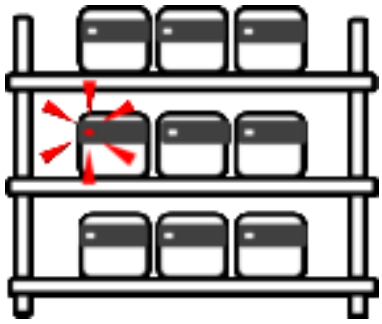

Figure 4. Shelve and box searches

6 Label Information

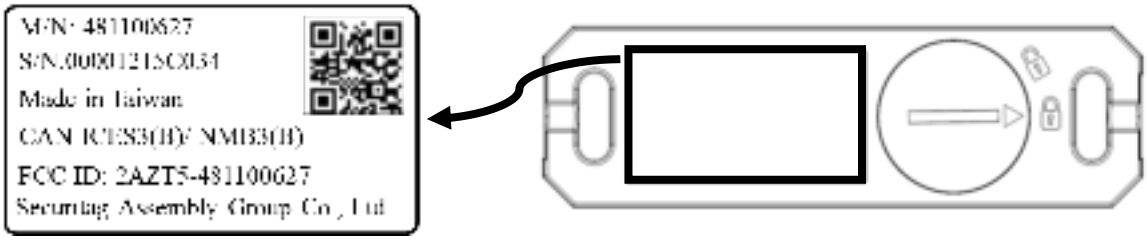

Figure 5. Information of QR code Label

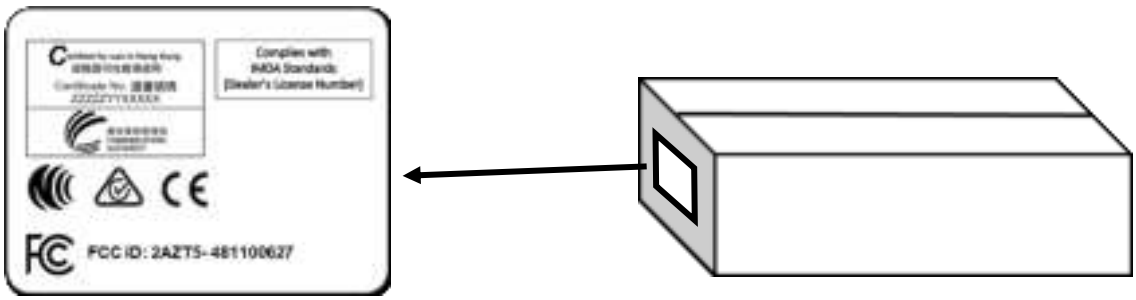

Figure 6. Information of Label on Packaging box

7 Quality

This product is compliant with RoHS directive.

8 Technical Support

If you are unsure of how to use or interpret the SEMI PASSIVE LED TAG 100x30x9mm, please contact SAG Technical Support at (886) 4-2492-5298 or mail to info@sag.com.tw.

9 Notice

SAG reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice.

This document supersedes and replaces all information supplied prior to the publication hereof.

10 Warranty and service

The warranty depends on the contract by demands; please contact your sales representative of SAG. Due to quality check before shipping, SAG has confidence on the quality of Tag. If you need any advanced services, please contact your sales representative or contact: info@sag.com.tw

11 FCC Compliance and Advisory Statement

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.

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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

12 Battery Warning

- Do not ingest the battery, Chemical Burn Hazard.
- This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- Keep new and used batteries away from children.
- If the battery compartment does not close securely, stop using the product and keep it away from children.
- If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

13 NCC警語

「取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾」。

14 NBTC

แบบที่ 2: เครื่องวิทยุคมนาคมที่ต้องได้รับยกเว้นใบอนุญาต