![cadi logo]

CADI SmartSense

SmartTAG STG-875W
User Manual

Contents

PRECAUTIONS

- Keep batteries away from children.
- Do not swallow batteries.
- Do not throw batteries into water.
- Do not throw batteries into fire.
- Do not short-circuit batteries. Battery must be fit into tag in correct orientation.
- Do not replace battery with incorrect type. Incorrect type of battery replacement may cause risk of exposure.
- Battery should be disposed according to the instructions

⚠ CAUTION

DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER AND REPLACE BY QUALIFIED SERVICE PERSONEL. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

IL Y A DANGER D'EXPLOSION S'IL Y A REMPLACEMENT INCORRECT DE LA BATTERIE. REMPLACER UNIQUEMENT AVEC UNE BATTERIE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR ET REMPLACER PAR DU PERSONEL QUALIFIÉ. METTRE AU RÉBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

Product Information

- Product model   : STG-875W
- Product name   : SmartTAG
- Manufacturing site   : 31 Ubi Road 1, #07-01A Aztech Building, Singapore 408694

Version Information

- This version is subject to change or upgrade without notice
- Version   : 01
- Issue date   : 10 April 2019

Declaration

Cadi Scientific Pte Ltd reserves the right to change the product described in this User Manual. All information contained in this User Manual is subject to change without notice.

1   Introduction

The STG-875W is a battery powered WiFi personnel location tracking tag. Location tracking is achieved using a combination of technologies based on low frequency (LF), infrared (IR), and WiFi signals that results in robust performance even in challenging environments.

When the STG-875W passes by a LF exciter (typically installed at key chokepoints or egress points) it will receive a location ID transmitted by the exciter.   The tag will transmit a WiFi signal to update tag status and tag location to the location tracking system.

When the STG-875W enters a room that has a IR beacon installed, the tag will receive a location ID transmitted by the IR beacon. The tag will transmit a WiFi signal to update tag status and tag location to the location tracking system.

The STG-875W will periodically transmit a WiFi signal to update tag status to the location tracking system.

For all the above scenarios, the location tracking system will also perform triangulation or trilateralation of the WiFi signal to determine the location of the tag.

2   Application

The tag can be comfortably worn by a patient using a hospital-grade wrist band.

3   Specifications

S/N	Feature	Description
1	**Physical**	
	Dimension	36mm x 42mm x 14mm
	Weight	28g
2	**Power**	
	Rechargeable	Yes
	User replaceable	No
	Battery type	3.7V 300mAh Li polymer
3	**Operating Environment**	
	Temperature	0ºC to 45ºC (during normal operation) 0ºC to 35ºC (during charging)
	Humidity	0 – 95% RH non-condensing
4	**RF Specifications**	
	Frequency	2.4GHz (receive and transmit)
5	**LF Specifications**	
	Frequency	125kHz (receive and transmit)
6	**IR Receiver Specifications**	
	Frequency	38kHz (receive only)
7	**Location-Update**	
	Update rate	Periodically every 10 minute or Immediately upon detection of LF or IR location ID
9	**Compliance**	
		TBD

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4   Charging the STG-875W

The STG-875W can be charged using the CGS-STG-875W multiple-tag charger. During charging the Red LED will light up as shown below.

When the tag is fully charged the Green LED will light up as shown below.

5   Tag Cleaning Instructions

-   Disinfect the tags by wiping with an alcohol sanitizer.

-   Dry the tag with a clean cloth.

Caution: The tag is not designed for autoclave sterilization.

6   Battery Status Indicator

Red LED will blink every 10 seconds when battery level is low