

Pick Cart Andon Light User Manual

Overview

The Pick Cart Andon Light is an indicator light product designed for Amazon's Last Mile Delivery Station, used on logistics transfer carts. By receiving different color instructions from Amazon WCS server, it can quickly change its light and draw the staff’s attention, which help the staff to locate the correct pick cart. The indicator light on the product uses a high-brightness RGB light source, with different colors to represent the status of the cart.

Key Features and Specifications

- The Andon light structure is adaptable to the existing types of pick cart structures for reliable installation.
- Easy battery replacement design.
- Connectivity Protocol: Support Cart2Light - IoT Protocol V6 (based on LoRaWAN)
- Communication range: 1 km (light of sight)
- Battery life: > 6 months.
- Operating temperature: -20℃ - 50℃
- Standby current: <740uA.
- OTA: FUOTA can be done through LoRa

Specifications

This section provides technical details of the device.

Parameter	Value	Notes
Operation Frequency	902MHz~928MHz	
Conducted Transmit Power	19dBm	
Conducted Receive Sensitivity (SF12/500KHz)	-125dBm	
Standby Current	<740uA	
Operation Voltage	2.8V~4.2V	
LED Color Type	Red, Blue, Green	Can be mixed to the other new color.
LED Red lumens (lm)	1.00	
LED Blue lumens (lm)	0.63	
LED Green lumens (lm)	3.89	
LED White lumens (lm)	5.48	
Environment Temperature And Humidity		
Operation Temperature	-20℃~50℃	
Operation Humidity	10% - 90% RH	
Storage Temperature	-20℃~60℃	
Storage Humidity	40% - 80% RH	
Charging Temperature	0℃~45℃	

Operating Environment

Parameter	Value	Notes
Operation Temperature	-20℃~50℃	
Operation Humidity	10% - 90% RH	
Storage Temperature	-20℃~60℃	
Storage Humidity	40% - 80% RH	
Charging Temperature	0℃~45℃	

Dimension & Weight

Parameter	Value	Notes
Dimensions	80x80x467mm	
Weight	1020g	Include battery

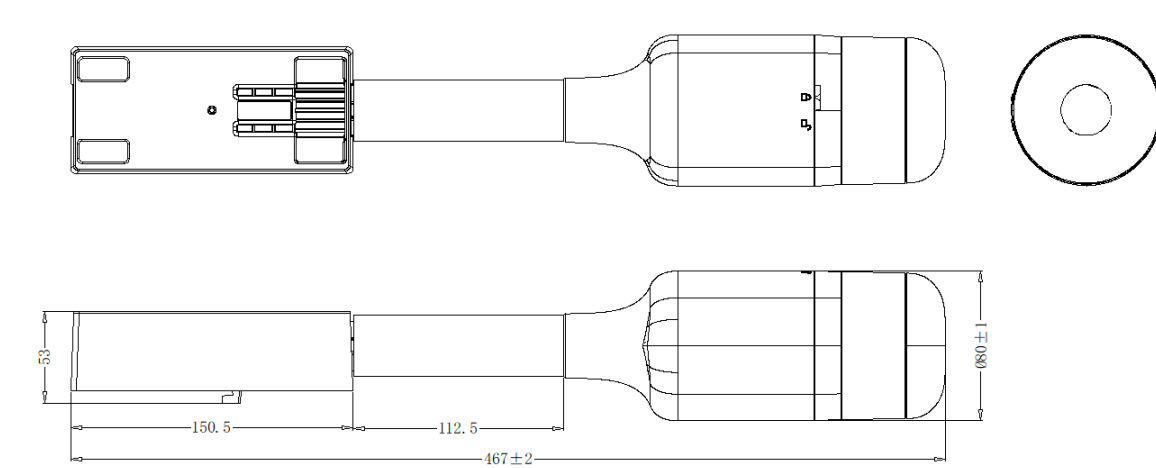


Figure : Dimension

User Interface

RGB332 Color Mode

Uses RGB332 mode for representing colors, where red (R), green (G), and blue (B) are represented by 3, 3, and 2 bits respectively, supporting the display of 256 colors. Users can adjust the PWM (Pulse Width Modulation) duty cycle for color output to change the brightness of the colors.

Indicator Light Behavior

- Join Network: Indicates that the device is attempting to join a network, alternating between flashing red (300ms) and green (300ms) lights, followed by a 1200ms off period, completing one attempt cycle.

- FUOTA: Green indicator light blinks every 10 seconds, indicating that a firmware upgrade operation is in progress.
- Factory: In factory mode, the indicator light alternates between blinking red and green, with a 100ms interval between each color, indicating that the device is in factory settings mode.

Button Behavior

- Factory reset: long press the reset button for more than 10 seconds, and then releases it after the red and green indicator lights alternately blink for 100ms each, thereby triggering a factory reset of the device.

Other Functions

Battery Level Monitoring: The device is capable of detecting and reporting its remaining battery percentage, which ranges from 0% to 100%, enabling users to monitor the power status.

Sales Markets

North American, Europe.

Industrial Design

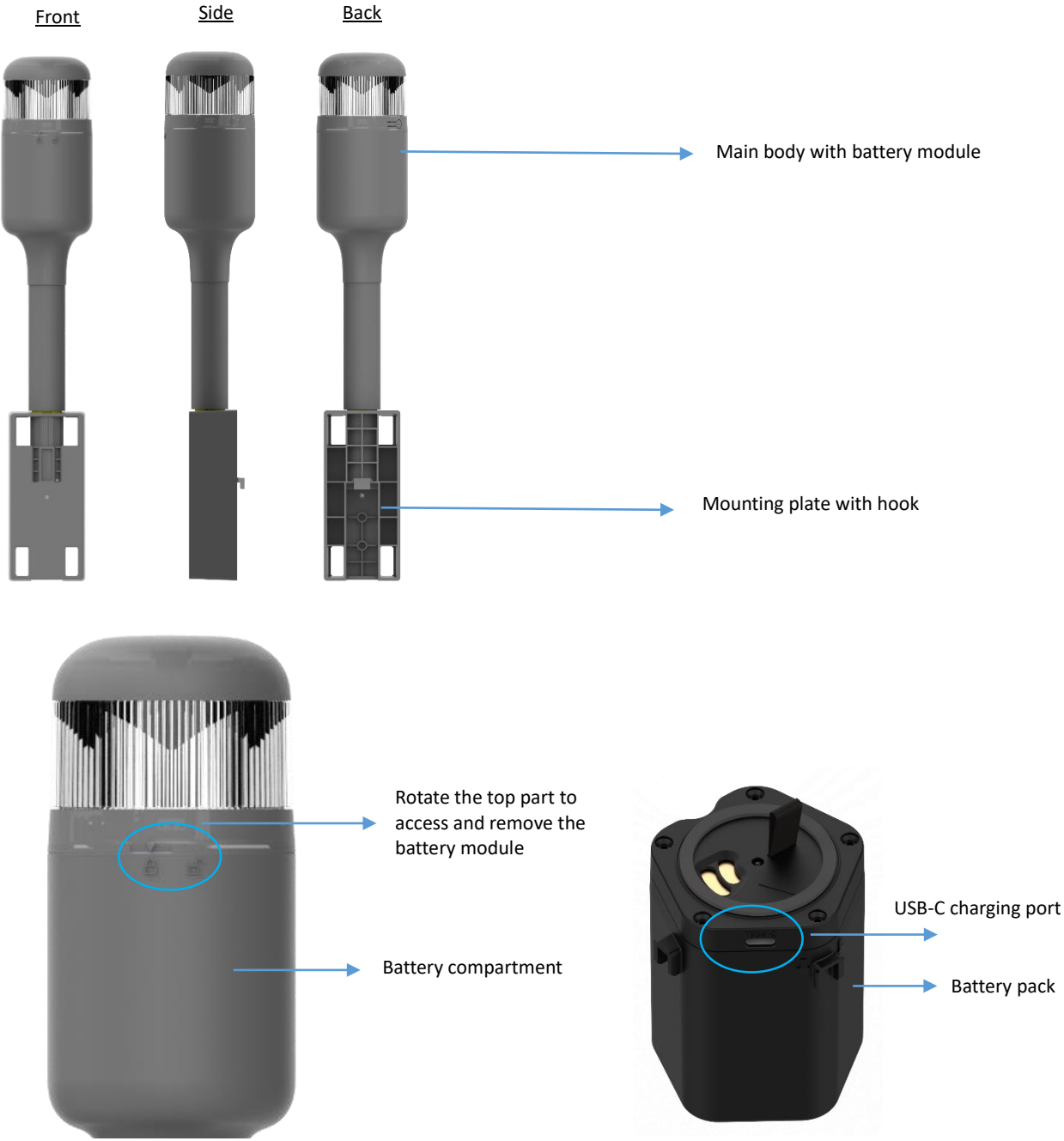


Figure : Industrial design – Battery part

Installation

Suggest 2 installation ways depends on the different cart.



Warnings

1. Use an adapter that supports 5V and has a current rating of 3A or above to charge the battery package. Otherwise, it will fail to charge.

- 2. The battery package should be charged in an environment with a temperature ranging from 0°C to 45°C.
- 3. Do not expose the battery to fire or water, or throw it into fire or water. Never short circuit the battery.
- 4. Do not disassemble, deform, or damage the battery.”
- 5. Keep this battery/product out of reach of children for safety reasons.
- 6. Never use a faulty charger to charge.

Compliance Information

FCC Regulation

FCC Supplier’s Declaration of Conformity
Brand name / model number: HCX-C00C-BL-A667-C / BAL-A00C-L-A667-C

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.

Suppliers Name: Amazon.com Services LLC
Suppliers Address (USA): 410 Terry Avenue North Seattle, Washington 98109 USA
Suppliers phone number and / or internet contact information: Edward Saldana
saldanae@amazon.com

Note:
The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user’s authority to operate the equipment.

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

This device complies with Part 15 of the FCC Rules, and licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

L’émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d’Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes :
1) L’appareil ne doit pas produire de brouillage;
2) L’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

This equipment complies with FCC radiation exposure and IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

Pour se conformer aux exigences de conformité CNR 102 RF exposition, une distance de séparation d'au moins 20 cm doit être maintenue entre l'antenne de cet appareil ettoutes les personnes.