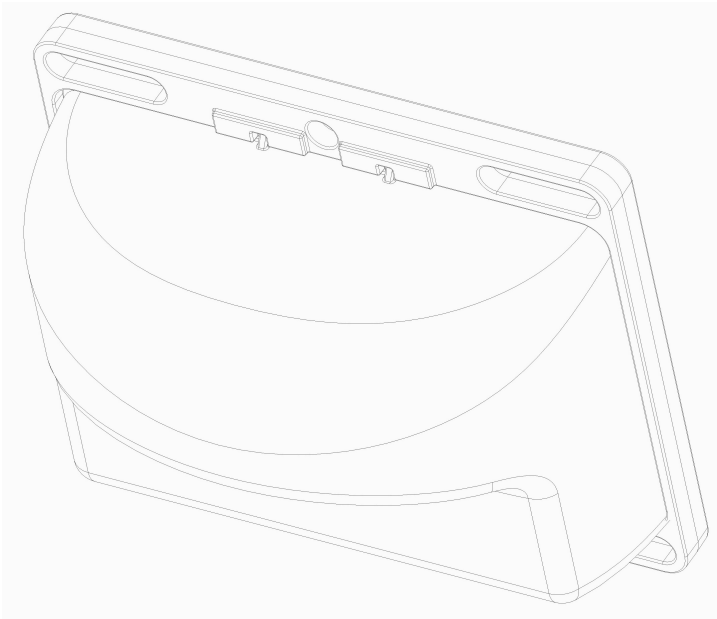


# HARDWARE USER MANUAL



**GWS-GWCT**  
Light Guided Operations

## **Federal Communications Commission (FCC)**

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 the receiver
- Connect the equipment onto an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio technician for help

Shielded interconnect cables and a shielded AC power cable must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device. Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

## **FCC Label Compliance 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
- (2) This device must accept any interference received, including interference that may cause undesired operation

## **Canada, Industry Canada (IC) Notices**

This device complies with Industry Canada's licence-exempt RSSs. 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.

## **Canada, avis d'Industrie Canada (IC)**

Le présent appareil est conforme aux CNR d'Industrie 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, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC) radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has been evaluated for and shown compliant with the IC Specific Absorption Rate ("SAR") limits when operated in portable exposure conditions.

## Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par l'appareil de sans fil est inférieure à la limite d'exposition aux fréquences radio d'Industry Canada (IC). Utilisez l'appareil de sans fil de façon à minimiser les contacts humains lors du fonctionnement normal. Ce dispositif a été évalué pour et démontré conforme à la Taux IC d'absorption spécifique ("SAR") des limites lorsqu'il est utilisé dans des conditions d'exposition portatifs.

- o compliance to ALL applicable EU standards to support CE mark.
- o compliance to FCC 47 CFR Part 15 Subpart B & ICES-003 Issue 6-2016
- o compliance to EU Radio Equipment Directive
- o compliance to FCC 47 CFR Part 15 Subpart C

## Safety Instruction

Your system is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

### Setting up your system

- Read and follow all instructions in the documentation before you operate your system.
- Do not use this product near water or a heated source such as a radiator.
- Set up the system on a stable surface.
- If you use an extension cord, make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.



*FCC CAUTION:*

*Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.*

## Attention during use

- If you encounter the following technical problems with the product, remove the battery and dispose the product to safe disposal.
  - The system was dropped or the cabinet is damaged.
  - The system performance changes.
  - The system not function properly even if you follow the operating instructions.
  - Liquid has been spilled into the system.
  - The battery has damaged or dropped.



*The warranty does not apply to products that have been disassembled by users.*

## Safety Notice and warnings

### Product disposal notice



**IMPORTANT:**

*In the European Union, this symbol indicates that this product including battery must not be disposed of with household waste. It is your responsibility to hand it over to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your local waste collection center or the point of purchase of this product.*

**CAUTION:**

*Risk of explosion if battery is replaced by an incorrect type.*

*Dispose of used batteries according to the instructions.*

### Nordic Lithium Safety Notice (for lithium-ion batteries)

**Safety Notice:**



*Danger of explosion if battery is incorrectly replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.*

### Attention during use



1. Do not place this product underneath heavy loads or in an unstable position.
2. Do not use or expose this product around magnetic fields as magnetic interference may affect the performance of the product.
3. Do not storage this product to high levels of direct sunlight, high-humidity or wet conditions.
4. Do not carry the product on the body (or pockets).



**CAUTION:**

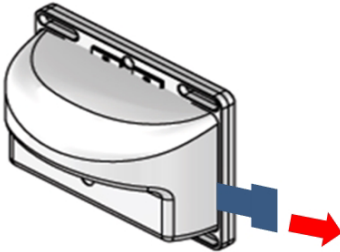
**RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.**

# Brief Introduction

## Specifications

Item		Spec Description
MCU		Telink 8269F512 ET32
LED		3 Color LED (RGB) *2
		2 Color LED *1
Connectivity	NFC	< 4 cm
	Zigbee	30 m
Sensors		G-Sensor
Battery Type		18650 Li-Ion Battery 2600mAH Rechargable
Operating Temp		-10°C~50°C
Dimension (W x L x H)		96* 78 *52 mm
IP Level		IP 54
Battery Life		6 months
Electrical Rating		3.3V

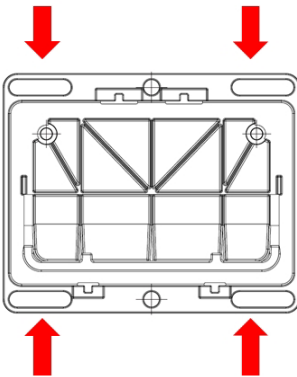
## How to Power On Tag:



By pulling the battery isolator strip away from the device, the Tag will power-on, which will be confirmed with an LED light blink.

## How to Attach Tag:

### Via Screws:



Tag device can attached by inserting fasteners, zip ties, nails or screws through the mounting holes located on each corner of the Tag and secured to the desired surface.

## How to Open Top Cover

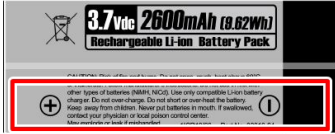


Compress the top cover at the center points of the top and bottom as shown.

To close the device, insert the cover closure tabs into the appropriate slots near the battery. Then compress the top cover in order to insert the other set of cover closure tabs near the LED lights.

## How to Insert Battery

When insert battery, the indication of high light area must face upward to prevent any short circuit from accident insert damage battery.



### Warning:

- Check battery before insert to system for usage.
- Do not place damage battery for usage.
- If there is any damage on battery please dispose properly, and handle with battery instruction.

## LED Light Behavior:

Color	Condition	Period/duty cycle/blink rate
Green	Initial battery insert and battery voltage > 4.09V (88% battery capacity)	100ms ON 200ms OFF. Therefore a period of 300ms and duty cycle = 33%. 10 blinks and stops
Red	Initial battery insert and battery voltage < 4.09V (88% battery capacity)	100ms ON 200ms OFF. Therefore a period of 300ms and duty cycle = 33% 10 blinks and stops
Red	Operational battery voltage < battery threshold Voltage (set from cloud/AMZ application)	500ms ON, 1500ms OFF. Therefore a period of 2s and duty cycle = 25% One blink repeats every 2 secs.
Red	Client state machine failure	100ms ON 400ms OFF. Therefore a period of 500ms and duty cycle = 20% 13 blinks with the 500ms period. This pattern repeats
Green	OTA	Blinking green: Blinks every 500 ms during the OTA update until the process completion.
Green	OTA	Solid green: during client flash erase. Will last until the flash erase and should then resume blinking green



# GWS-GWCT

## Light Guided Operations

Elitegroup Computer Systems Co., LTD.  
No. 239, Sec. 2, Tiding Blvd., Neihu District, Taipei City, Taiwan (11493)