



PUDU GW1 User Manual

Model: PGCG01

SHENZHEN PUDU TECHNOLOGY CO., LTD.



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Foreword

Purpose

This manual introduces the functions and technical specifications of the PGCG01 push button PUDU GW1, which is convenient for users to understand and use the product.

Audience

This manual applies to:

- Customer
- Sales Engineer
- Installation and commissioning engineer
- Technical Support Engineer

Notation convention

The following symbols may appear in this manual and represent the following meanings.

Symbol	Explain
 Danger	Indicates a high potential hazard which, if not avoided, could result in death or serious injury
 warning	Indicates a moderate or low hazard potential that, if not avoided, could result in minor injury to personnel, damage to the robot, etc
 Note	Indicates a potential risk that the text, if ignored, could result in damage to the robot, loss of data, or unpredictable results
(Description	The expression is the additional information of the text, which is the emphasis and supplement to the text.

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1. Safety instructions

- Do not place the PUDU GW1 near a heat source or an exposed fire source, such as a microwave oven, an oven, a fire, a candle, or other place where high temperature may be generated, so as to avoid the malfunction or explosion of the PUDU GW1.
- Do not use the PUDU GW1 in a wet place or near the magnetic field, so as not to cause the internal circuit failure of the PUDU GW1.
- Do not wash or soak the PUDU GW1 directly to avoid damage to the components.
- Do not place the PUDU GW1 in direct sunlight.
- Do not store or transport the PUDU GW1 in the same box with the inflammable and explosive articles.
- Do not make the PUDU GW1 receive strong impact or vibration, so as not to cause malfunction of the PUDU GW1.
- Do not remove or modify the built-in battery of the PUDU GW1 by yourself to avoid damage to the battery or the PUDU GW1.
- Do not dispose of the beeper and its accessories as ordinary household waste. Please observe the local regulations for the disposal of this product and its accessories and support the recycling action.
- Do not use harsh chemicals, cleaning agents, or strong detergents to clean the beeper. Wipe the PUDU GW1 with a clean, dry cloth.
- Please do not disassemble or modify the PUDU GW1 and accessories without authorization, otherwise the PUDU GW1 and accessories will not be covered by the company's warranty. Please contact Purdue technical support engineers in case of PUDU GW1 failure.
- PUDU GW1 has been tested and shown to be waterproof and dustproof in a specific environment, but the equipment is not professional waterproof equipment.
- Do not use the PUDU GW1 in locations where the use of wireless devices is expressly prohibited, as it may interfere with other electronic devices or cause other hazards.
- In medical and health care facilities where the use of wireless devices is expressly prohibited, follow the rules of the facility.
- Radio waves generated by the PUDU GW1 may affect the normal operation of implantable medical devices or personal medical devices, such as pacemakers, cochlear implants, hearing AIDS, etc. When using the PUDU GW1, please keep at least 15 cm away from the implanted medical devices (such as pacemakers, cochlear implants, etc.).

2. Product composition

2.1 Introduction

The PGCG01 push-button PUDU GW1 (hereinafter referred to as the PUDU GW1) is a call notification device supporting LoRa, which shall be used together with the Purdue Technology PUDU GW1 gateway and the Purdue Technology robot supporting LoRa communication mode. Its call communication service system is based on LoRa LAN and cloud services. The caller is bound to the robot through the gateway, and a local area network is established through the LoRa communication mode. When the PUDU GW1 initiates a task request, it will send the request to the gateway, the gateway will assign the task to the robot, and the robot will return the execution result to the PUDU GW1 through the gateway after receiving the task. A user can call that robot to a designated call point through the PUDU GW1, and the multi-PUDU GW1 calling is supported, so that the user can use the robot efficiently. It is applicable to the scenarios such as multi-order call in the restaurant and multi-order call in the office distribution.

2.2 Shipping list

Key PUDU GW1 X 1, manual X 1, adhesive X 1.

2.3 Appearance components

2.4 Technical specifications

Product characteristics	Explain
Product name	PUDU GW1
Product model	PGCG01
Power supply mode	AC-DC Adapter
Supply voltage	5V 2000mA
Antenna	5
Shell material	ABS
Weight	300 g
Heat dissipation mode	Fan less cooling
Size	150 mm x 220 mm x 185 mm
Color	White
Installation method	Desktop placement and wall hanging
Operating frequency band	2402.0MHz ~ 2483.5MHz
Transmitting power	12.5dBm Max, adjustable
Communication system	LoRa (2.4G)、Wi-Fi (2.4G)



Product characteristics	Explain
Communication protocol	PUDU LoRa TSCH communication protocol
Operating power consumption	12W (typ.), 17w (max.)
Endurance	≥ 1 year (typical)
Configure the interface	Pingo Magnetic Configuration Interface
Work environment	Temperature: 0 °C ~ 40 °C Humidity: ≤ 85% RH
Storage environment	Temperature: -40 °C ~ 65 °C Humidity: ≤ 85% RH
Indicator light	6

3. Product use

3.1 Network access process of PUDU pager to the GW1

The GW1 and the pager are configured in the same network and use the same 2.4G communication frequency

3.2 Pager binding process

- 1、 Confirm that the pager and robot have entered the network at the gateway side
- 2、 Operate on the robot side to enter the pager binding interface
- 3、 Double click the button of the pager, and you will see the prompt of the pager equipment to be configured on the robot side
- 4、 Click the corresponding table number on the robot side and click the OK button to complete the binding operation

3.3 Indicator light description

Indicator type	Quantity	Description
Power indicator	1	Power indicator on, means that the gateway has been powered on normally and is in working state
Role indicator	1	If the role indicator is always on, it means that the gateway belongs to the "root gateway" under Networking status
Work indicator	4	The working indicator light is always on, indicating that the corresponding 2.4G interface is in working state

4. After-sales policy

4.1 Free warranty service

Shenzhen Purdue Technology Co., Ltd. promises to provide free product warranty service within the effective warranty period of the product (the warranty period of different parts of the product may be different, see the Warranty Period Table of Main Parts for details) from the date of product activation under the following conditions, and customers do not need to pay after-sales service fees. In the case of exceeding the warranty period or not belonging to the free product warranty service, a certain fee shall be charged according to the normal price. Please contact the after-sales service hotline of the official website for product maintenance.

- The free warranty service must meet the following conditions:
 - The self-purchased products are normally used within the specified product warranty period, and there are non-artificial quality problems.
 - There is no unauthorized disassembly of the machine, no modification or installation guided by the official instructions, and other non-man-made faults.
 - The product serial number, factory label and other marks shall be free of signs of tearing or alteration.
 - Provide valid proof of purchase, documents and order number.
 - The damaged spare parts replaced during the free warranty period belong to Purdue Technology and shall be sent back according to the requirements of Purdue Technology, otherwise Purdue Technology has the right not to provide free warranty service.
- The following situations are not included in the free product warranty service:
 - Quality problems caused by collision, burning, artificial modification and foreign matter (water, oil, sand, etc.) caused by non-product quality problems.
 - Damage caused by unauthorized modification, disassembly and shell opening under the guidance of unofficial instructions.
 - Damage caused by incorrect installation, use, operation and storage not in accordance with the instructions.
 - Damage caused by assembly repaired by the customer without official instruction.
 - Damage caused by circuit modification and improper use of batteries under the guidance of unofficial instructions.
 - Damage caused by use in excess of the safe load.
 - Damage caused by insufficient discharge when the battery is insufficient or when the battery with quality problems is used.
 - Due to the customer's own reasons, they need secondary on-site deployment or installation and commissioning services.

- Failure and damage caused by force majeure (such as earthquake, fire, etc.).
- Other circumstances that do not meet the conditions of free warranty.
- Warranty period: the starting date of the warranty period shall be the date when the system records the activation of the product. For the warranty period of different parts of the product, please refer to the Table of Warranty Period of Main Parts.

4.2 Return and exchange policy

- **A return may be requested if one of the following conditions is met:**
 - Within 7 natural days after the customer receives the goods, obvious manufacturing defects are found when the goods are not used. The round-trip freight is borne by Purdue Technology.
- **We have the right to refuse the customer's return request in the following cases:**
 - The goods were damaged, but they did not ask the delivery personnel to return them on the spot when they received the goods.
 - The return request is made after the product return period of more than 7 natural days (calculated from the date of receipt).
 - The returned goods are incomplete, the outer package, accessories, gifts and instructions are incomplete, or the appearance is artificially damaged.
 - Failure to provide legal purchase vouchers or documents when returning goods, or forgery or alteration of documents.
 - Collision and burning caused by non-product quality problems, as well as quality problems caused by unauthorized modification, foreign matter (water, oil, sand, etc.), incorrect installation, and failure to use and operate in accordance with the instructions.
 - Tear and alter labels, machine serial numbers, waterproof marks, anti-counterfeiting marks, etc.
 - Products damaged due to force majeure, such as fire, flood, lightning, traffic accidents and other force majeure.
 - After contacting Purdue Technology Co., Ltd. to confirm the return service, if the corresponding items are not sent within 7 days from the date of contacting Purdue Technology, Purdue Technology has the right not to accept them.
- **Replacement may be requested if one of the following conditions is met:**
 - Within 15 natural days after the customer receives the goods, obvious manufacturing defects are found when the goods are not used; The round-trip freight is borne by Purdue Technology.
 - Within 15 natural days after the customer receives the goods, the product can not be started normally after unpacking according to the instructions or

under the guidance of technicians, or non-man-made product quality defects are found; The round-trip freight is borne by Purdue Technology.

- When the customer receives the goods, he unpacks and checks them in front of the delivery man, and finds that the products are damaged due to transportation. The round-trip freight is borne by Purdue Technology.
- The goods actually received are obviously inconsistent with the description of the goods; The round-trip freight is borne by Purdue Technology.
- **We have the right to refuse the customer's request for replacement in the following cases.**
 - Failure to provide legal purchase vouchers or documents when exchanging goods, or forgery or alteration of documents.
 - The goods were damaged, but the delivery personnel were not asked to return or replace the goods on the spot when receiving the goods.
 - A request for replacement made after the product replacement period of more than 15 natural days (calculated from the date of receipt).
 - The replacement goods are incomplete, the outer packaging, accessories, gifts and instructions are incomplete, or the appearance is damaged due to man-made reasons.
 - The goods have been tested by the technical support department of Purdue Technology Co., Ltd. and there is no quality problem in itself.
 - Collision and burning caused by non-quality problems, as well as product quality problems caused by unauthorized modification, foreign matter (water, oil, sand, etc.), incorrect installation, and failure to use and operate in accordance with the instructions.
 - Tear and alter labels, machine serial numbers, waterproof marks, anti-counterfeiting marks, etc.
 - Products damaged due to force majeure, such as fire, flood, lightning, traffic accidents and other force majeure.
 - After contacting Purdue Technology Co., Ltd. to confirm the return service, if the corresponding items are not sent within 7 days from the date of contacting Purdue Technology, Purdue Technology has the right not to accept them.

4.3 Instructions for return and replacement handling

4.3.1 Return processing time

After your return application is approved, Purdue Technology will handle the return for you within 7 working days from the date of receiving the problem goods you sent back.

4.3.2 Replacement Processing Time

After your replacement application is approved, Purdue Technology will complete the replacement for you within 15 working days from the date of receiving the problem goods you sent back.

4.3.3 Processing time for returning to the factory for maintenance

After your maintenance application is approved, Purdue Technology Co., Ltd. will complete the maintenance for you within 30 days from the date of receiving the problem goods you sent back. If the service is delayed due to national statutory holidays or the after-sales service centers of some brand manufacturers, the repair time will be extended accordingly. Please understand the inconvenience caused to you.

4.3.4 About the refund time

After the approval of Purdue Technology, the refund will be transferred to the other party's bank account within 10 working days after receiving the return.

4.4 After-sales service instructions within the warranty scope

4.4.1 Remote technical guidance services

Purdue Technology provides online and remote technical support channels within 30 minutes after the occurrence of after-sales problems, and customers need to cooperate with technical engineers for problem diagnosis and troubleshooting.

4.4.2 On-site service

If the problem must be solved by the technical engineer of Purdue Technology, if the customer is located in a city directly operated by our company, Purdue Technology will assign professional technicians to provide free on-site service within 24 hours after the after-sales problem occurs; In other areas, professional technicians are assigned to provide free on-site service within 72 hours after the occurrence of after-sales problems.

4.5 After-sales service beyond warranty

4.5.1 Remote technical guidance services

Purdue Technology officials provide free online and remote technical support channels for products outside the warranty scope within 30 minutes after after-sales problems occur, and customers cooperate with technical engineers to diagnose and repair problems.

4.5.2 After-sales service expense standard beyond the warranty scope

The service fee of Purdue Technology includes: after-sales maintenance fee and spare parts fee.

- Purdue Technology technicians provide remote technical guidance services, customer assistance to deal with the problem, Purdue Technology only charges for spare parts.
- The after-sales service provided by Purdue Technology technicians includes the cost of spare parts and after-sales maintenance.
- From the date of completion of the paid repair of the product, Purdue Technology provides a 90-day warranty period for the replaced parts, and the unreplaced parts are not covered by the warranty.

Charging standard for after-sales maintenance:

- Within 100 kilometers (including 100 kilometers), 400 yuan per time.
- 100 km to 300 km (including 300 km) 800 yuan/time.

- More than 300 kilometers, 1000 yuan per time.
- Distance calculation method: The distance between the service store and the nearest service outlet of Purdue Technology is taken as the calculation standard.

4.6 After-sales service consultation

If you have any questions, please contact Purdue Technology Customer Service Hotline: 400-0826-660.

FCC Statement:

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

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.

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 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 transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

ISED Statement:

This device contains 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 interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

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 transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. *Cet émetteur ne doit pas être colocalisé ou fonctionner en conjonction avec une autre antenne ou un autre émetteur.*

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS-102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 20 centimètres entre le radiateur et votre corps.