



User Manual

Controller 3.0

FCC ID: 2BOMG-CTRL3

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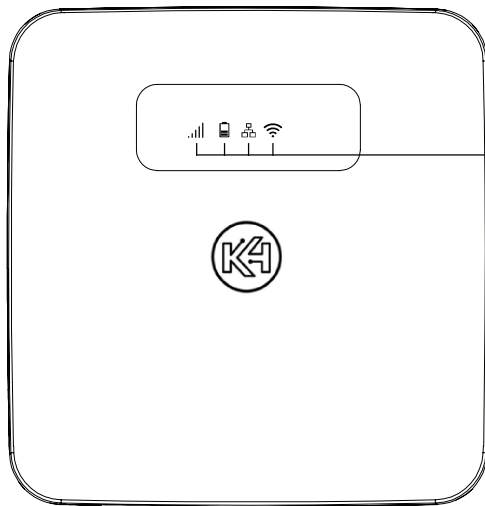
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1. Introduction

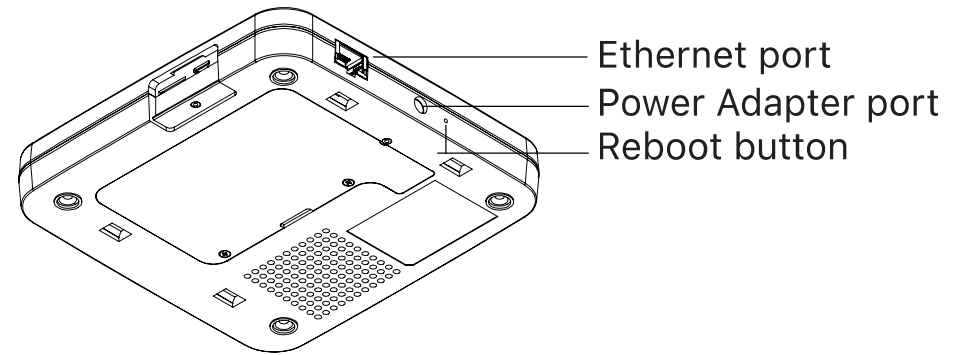
K4Connect Controller 3.0 is a multi-protocol IoT Gateway featuring Z-Wave 700 series, Zigbee HA 3.0, BT/BLE 5.2, Wi-Fi 2.4GHz, and Ethernet. Designed for seamless compatibility, it supports a wide range of popular Zigbee and Z-Wave devices.

Its cutting-edge parallel processing architecture delivers Hard Real-Time Performance, making it the fastest, most secure, Edge Computing IoT Gateway on the market.

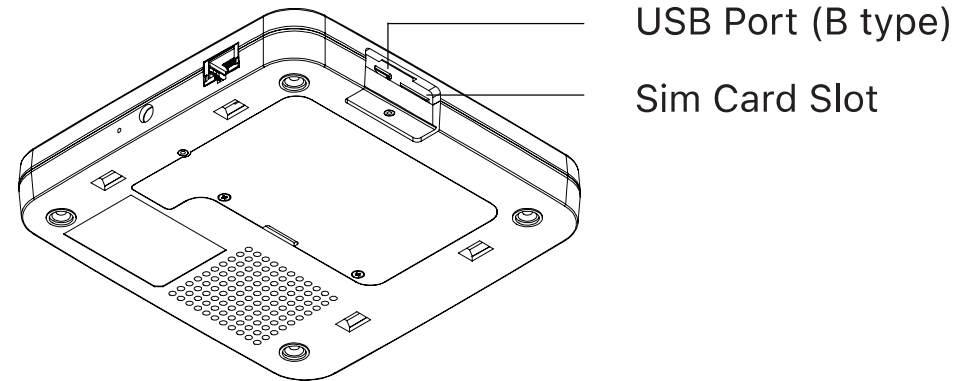
Product Structure



LED Indicators



Ethernet port
Power Adapter port
Reboot button



USB Port (B type)
Sim Card Slot

Figure 1: Product Structure

2. Technical Specifications

Processor & Memory	
Processor	Make & Model Number: Allwinner A64
	Configuration: Quad Core Arm Cortex A-53 Operating Freq: 1.2 GHz
Memory	RAM: 2 GB eMMC: 8 GB Default OS: Fedora IoT
Other Key Features	
RTC, Watchdog, Debug and SIM slot	RTC: On-Board RTC with CMOS battery.
	Hardware Watchdog: Incorporates an external microcontroller-based hardware watchdog to initiate a processor restart in the event of unforeseen system hang-ups.

	Debug Port: USB to UART Converter for debug purposes inside the side compartment.
	SIM Card slot: Provision to insert Micro SIM card is present inside the side compartment.
Environmental	
Operating Temperature	0 °C to +50 °C (For indoor use in dry locations only)
Mechanical	
Dimensions (W x H x D)	140 x 145 x 30 mm
Power Supply & Battery	
Adapter	Input: 100-240 VAC, 50/60 Hz
	Output: 5.0 VDC, 3.0 A

Communication	
Supported Protocols	Z-Wave: 700 Series
	Wi-Fi: 2.4 GHz (b/g/n)
	Zigbee: HA 3.0 Profile
	BT/BLE 5.2
	Ethernet:10/100M Port

3. Installation

3.1 Requirements

- You will need a smartphone (Android/iOS) with the K4Ops App installed and your account activated on it.
- A Wi-Fi router operating on 2.4 GHz frequency band is required.

Get **K4Ops** App at



For detailed support articles,
scan the QR code below:



3.2 LED Indicators

 LTE	Connected/No Internet	No Indication
	Connected/Online	Solid Green
 Battery	When Powered	Solid Green
	>95%	Solid Green
	<95% / >50%	Blinking Green
	<50%	Blinking Red
 Ethernet	Connected/No Internet	Blinking Green
	Connected/Online	Solid Green
	Not Connected	No Indication
 Wi-Fi	Connected/No Internet	Blinking Green
	Connected/Online	Solid Green
	No Internet / Access Point mode	Blinking Red

3.3 Installation of the Gateway

Launch the K4Ops App. From the Home screen, navigate to Install System, and follow the device pairing instructions.

3.4 Onboarding Procedure

WiFi Onboarding:

- The controller has been configured at the factory for the K4Community enterprise network. To configure for a different network, please contact support.
- After powering on the Gateway, the Wi-Fi LED will turn solid green, indicating that the Wi-Fi is connected and has an Internet connection.
- If the Wi-Fi LED is flashing green, the Wi-Fi is connected, but the controller cannot connect to the Internet. Please check the Internet connection.

Ethernet Onboarding:

- Connect an Ethernet cable from the router to the Gateway.
- After powering on the Gateway, the Ethernet LED will turn solid green.

3.5 Factory Reset

- To Reset the Gateway please contact support.

3.6 Reboot the Device

To reboot the Controller, press and hold the reset button using the pin provided in the box for 3 seconds. This action will reboot the Controller.

4. Device Care and Maintenance

Correct Disposal:

Proper disposal of the Controller 3.0 is vital for safety and environmental considerations. Please adhere to the following guidelines when disposing of the device:

1. Do not dispose of the device into fire: The Controller 3.0 contains combustible components. It is imperative to never dispose of the device by burning it or exposing it to fire. Doing so can lead to hazardous situations and environmental pollution.
2. Do not dispose of the device with regular waste: The Controller 3.0 should not be discarded with regular household or municipal waste. Improper disposal may result in the device ending up in landfills or being incinerated, which can have negative effects on the environment and human health.

Proper Disposal Options:

To ensure the environmentally responsible disposal of the Controller 3.0, consider the following options:

1. **Electronic waste recycling:** Look for local electronic waste recycling facilities programs in your area. These facilities specialize in the proper handling and recycling of electronic .

Contact your local recycling center or municipality for information on drop-off points or collection events for electronic waste.

2. **Manufacturer or retailer programs:** Check if the manufacturer or retailer of the Controller 3.0 as a take-back program or recycling initiative in place. Many companies offer recycling services for their products to promote responsible disposal. Visit their official website or contact their customer support for more information on-

-how to return the device for proper recycling. By following these guidelines and responsibly disposing of the Controller 3.0, you contribute to minimizing environmental impact and promoting sustainable practices.

5. FCC Statement

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this 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.

RF Exposure Information

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 and your body.

6. Warranty

K4Connect warrants its products against defects in materials and/or workmanship under normal use for a period of ONE (1) YEAR from the date of purchase by the original purchaser ("Warranty Period"). If a defect arises and a valid claim is received within the Warranty Period, then as your sole remedy (and K4Connect's sole liability), K4Connect will at its option either 1) repair the defect at no charge, using new or refurbished replacement parts, or 2) replace the product with a new unit that is functionally equivalent to the original, in each case within a mutually

-agreed lead time between both the purchaser and K4Connect, following receipt of the returned product. A replacement product or part assumes the remaining warranty of the original product. When a product or part is exchanged, any replacement item becomes your property and the replaced product or part becomes a property of K4Connect.

Obtaining Service:

To obtain warranty service, speak with your point of contact at K4Connect or with the authorized distributor from your country of purchase. Please be prepared to describe the product that needs service and the nature of the problem. A purchase receipt is required. The product must be insured, and shipped freight prepaid and securely packaged. You must contact K4Connect for a Return Material Authorization Number ("RMA Number") before shipping any product, and include the RMA Number, a copy of your purchase receipt and a description of the problem you are experiencing with the product. Any claim-

-under this Limited Warranty must be submitted to K4Connect before the end of the warranty period.

Exclusions:

This warranty does not apply to: a) damage caused by failure to follow the instructions(as explained in the user manual) relating to the product's use or the installation of components b) damage caused by accident, abuse, misuse, transport, neglect, fire, floods, earthquake or other external causes; c) damage caused by service performed by anyone who is not an authorized representative of K4Connect; d) accessories used in conjunction with a covered product; e) the Product or part that has been modified to alter functionality or capability; f) items intended to be periodically replaced by the purchaser during the normal life of the Product, including, without limitation, batteries, bulbs or cables; g) the Product that is used commercially or for a commercial purpose, in each case as determined by K4Connect.

K4CONNECT SHALL NOT BE LIABLE FOR (1) ANY LOST PROFITS, COST OF PROCUREMENT OF SUBSTITUTE PRODUCTS, OR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR (II) ANY AMOUNTS IN EXCESS OF THE PURCHASE PRICE FOR THE PRODUCT, IN EACH CASE WHETHER RESULTING FROM THE USE OF OR INABILITY TO USE OF PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, EVEN IF COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. TO THE EXTENT PERMITTED BY APPLICABLE LAW, K4CONNECT DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS. IF K4CONNECT CANNOT LAWFULLY DISCLAIM STATUTORY OR IMPLIED WARRANTIES, THEN TO THE EXTENT PERMITTED BY LAW, ALL SUCH WARRANTIES SHALL BE LIMITED IN DURATION TO THE WARRANTY PERIOD.

To exercise your rights under this warranty, please follow the instructions under the heading "Obtaining Service" or contact K4Connect at K4Connect, 2121 RDU Center Drive, Suite 200, Morrisville, NC 27560