

RAK7268V2/RAK7268CV2 WisGate Edge Lite 2

Thank you for choosing RAK7268V2/RAK7268CV2 WisGate Edge Lite 2 in your awesome IoT Project! 🎉 To help you get started, we have provided you with all the necessary information for your product.

Resources

- For more information, check the Frequently Asked Questions [🔗](#) for WisGate Edge.
- Visit the RAKwireless Forum [🔗](#) for specialized assistance from the RAKstars community and RAKwireless experts.
- Check our extensive collection of Applications & Tutorials [🔗](#) to get inspiration on exciting new use cases.
- Need more specialized product assistance? Contact RAKwireless Support [🔗](#).

⚠️ IMPORTANT

The new RAK7268V2/RAK7268CV2 gateway now replaces the RAK7268. You can still browse the product information of [RAK7268](#) [🔗](#)

Product Description

The RAK7268V2 / RAK7268CV2 WisGate Edge Lite 2 is part of the RAK Edge Series, offering flexible connectivity options to meet the needs of a wide range of IoT (Internet of Things) applications. Designed for indoor use, this gateway simplifies deployment with built-in Ethernet connectivity and onboard 2.4 GHz WiFi for easy configuration through the default WiFi AP mode. The RAK7268CV2 version also supports LTE uplink communication, offering optional cellular backhaul for remote deployments or environments requiring LTE connectivity.

This gateway operates on [WisGateOS 2](#), a powerful platform that ensures enhanced security, robust functionality, and flexibility for customizations via extensions. Furthermore, the RAK7268V2 / RAK7268CV2 integrates seamlessly with [WisDM](#), enabling fleet management and remote monitoring of multiple devices, making it an ideal choice for managing large networks of gateways.

Designed for versatile indoor deployments, this gateway supports flexible power input options—including PoE, 12 V_{DC}, and 9–24 V_{DC}—as well as multiple LTE configurations with either built-in antennas or external antennas.

Product Variants Overview

Gateway Model	Configuration Type	LTE Module	Power Input
RAK7268CV2	LTE (Internal Antennas)	Built-in LTE Cat 4 module	12 V _{DC}
RAK7268CV2	LTE (External Antennas)	Built-in LTE Cat 4 module	12 V _{DC}
RAK7268CV2	LTE (Internal Antennas)	Built-in LTE Cat 4 module	9–24 V _{DC}
RAK7268V2	Non-LTE	Not included	12 V _{DC}
RAK7268V2	Non-LTE	Not included	9–24 V _{DC}

Product Features

Hardware

- 8 LoRa channels
- Supports 2.4 GHz WiFi AP for easy configuration
- 100M Base-T Ethernet with PoE (Power over Ethernet)
- RP-SMA LoRa antenna connector
- Multi backhaul options with Ethernet, WiFi, and Cellular (only in RAK7268CV2)
- SD card for log backup and LoRa frame buffering (in case of backhaul failover)

- Optional LTE Cat 4 network (only in RAK7268CV2)
- **Breathing light** for visual monitoring the gateway's status

Software

- **WisGateOS 2** [↗](#) for enhanced security and functionality
- **Extension add-ons** for customized gateway functionality:
 - Compatible with WisGateOS 2 version 2.2.x or later [↗](#)
 - Compatible with WisGateOS 2 versions 2.0.x and 2.1.x [↗](#)
- **WisDM** [↗](#) for remote management and monitoring
- Built-in **Network Server**
- **Basic Station** and **Packet Forwarder** modes
- **LoRa Frame Filtering** (node whitelisting in Packet Forwarder mode)
- **MQTT v3.1 Bridging with TLS encryption** (compatible with ChirpStack LNS)
- LoRa frame buffering in **Packet Forwarder mode** in case of NS outage, ensuring **no data loss**

NOTE

A 9~24 V_{DC} power input version of RAK7268V2 or RAK7268CV2 WisGate Edge Lite 2 is available upon request. For more information or to make a purchase, kindly contact inquiry@rakwireless.com [↗](#).

Field Applications

As the IoT technology gradually penetrates into various industries and all aspects of life, the application scenarios of LoRaWAN gateways have become very extensive. This section highlights field applications of the RAK7268V2 / RAK7268CV2 WisGate Edge Lite 2 gateways, aiming to provide inspiration for your solutions.

NOTE

The following scenarios and applications are only examples. The field applications of LoRaWAN gateway are very extensive, including but not limited to these examples.

Smart Home

LoRa-based solutions provide an ideal platform for solving the indoor connectivity challenges of traditional platforms, including WiFi, Bluetooth, Zigbee, or Z-Wave. Whether on the home's periphery or in the yard, it can connect these devices to the same platform, far beyond the scope of traditional connectivity technologies.

- Garages
- Door locks
- Outdoor lighting
- Pet geofencing
- Connected pest traps
- Leak detection

Smart Building

LoRa-based smart building solutions allow building managers, owners, tenants, and service providers to view building functions remotely and ensure that all building elements are working harmoniously.

- Monitoring of temperature in basements/common areas
- Monitoring of humidity levels
- Monitoring of electricity consumption
- Monitoring of ventilation flow
- Analysis of building integrity

Utilities

IoT is increasingly present in utilities (water, electricity, gas, and heating). It enables different approaches to smart utilities.

- Automatic transmission of electricity and water usage
- Detection of water leaks in pipes
- Detection of power failure, over-consumption (fraud), or under/over-voltage
- Analysis of pressure and temperature in a gas pipe, as well as possible leaks

Software and Services

WisGateOS 2

The latest unified operating system for RAK gateways offers a feature-rich environment to access and configure the LoRaWAN gateway. WisGateOS 2 is built on the latest OpenWrt kernel for enhanced security. It employs a simplified user interface that improves usability and programmability. Integrated with WisDM, it enables remote management of gateways and firmware. With its extensibility, you can add additional features and functions to your gateways. For more information, refer to [WisGateOS 2 User Manual](#) .

WisGateOS 2 Extensions

WisGateOS 2 features an extension functionality, that allows features and functions be added, removed, or updated based on your needs. For more information, refer to the [WisGateOS 2 Extensions User Manual](#):

- Compatible with WisGateOS 2 version 2.2.x or later [↗](#)
- Compatible with WisGateOS 2 versions 2.0.x and 2.1.x [↗](#)

WisDM

WisDM is a cloud-based device management platform specifically designed to help you optimize the ways of controlling your gateways. The WisDM device management software supports IoT networks of any scale built around commercial-grade LoRaWAN Edge gateways from RAKwireless. Additionally, the WisDM platform offers you remote configuration, OTAA updates, and scalable management. For more information, refer to [WisDM User Manual](#) .

Indoor Gateway Family

RAK offers a diverse range of indoor gateways designed to meet various connectivity and deployment needs. These gateways provide reliable, high-performance solutions for different use cases, incorporating advanced connectivity options such as LTE, WiFi, and LoRa. Below is an overview of key indoor gateways in the RAK product family:

Feature	RAK7268V2 / RAK7268CV2 WisGate Edge Lite 2	RAK7266 WisGate Soho Lite
Product Image		
LoRa Features	<ul style="list-style-type: none"> • SX1302 with 8 channels • RX Sensitivity: -139 dBm (Min) • TX Power: 27 dBm (Max) 	<ul style="list-style-type: none"> • SX1302 with 8 channels • RX Sensitivity: -139 dBm (Min) • TX Power: 27 dBm (Max)
Frequency Bands	EU868, IN865, US915, AU915, KR920, AS923-1/2/3/4, EU433, CN470	EU868, IN865, US915, AU915, KR920, AS923-1/2/3/4, EU433, CN470
Cellular Connectivity	Available with RAK7268CV2, LTE Cat 4 (IoT/M2M-optimized) Supports EG95-E, EG95-NA, EC25-J, EC25-AU, EC25-E	LTE Cat 1 (IoT/M2M-optimized) Supports EG915U-EU, EG915U-LA, EG915Q-NA
WiFi	<ul style="list-style-type: none"> • 2.4 GHz (802.11b/g/n) • Operation Channels: 1-13 	<ul style="list-style-type: none"> • 2.4 GHz (802.11b/g/n) • Operation Channels: 1-13
Multi-Network Connectivity	Ethernet, WiFi, LTE	Ethernet, WiFi, LTE
Power Supply	PoE (IEEE 802.3 af): 36-57 V _{DC} 12 V _{DC} (depending on the version) 9-24 V _{DC} (depending on the version)	12 V _{DC}

Feature	RAK7268V2 / RAK7268CV2 WisGate Edge Lite 2	RAK7266 WisGate Soho Lite
GPS	Not supported	Not supported
Antenna	<ul style="list-style-type: none"> • LoRa: External antenna • WiFi: Internal antenna • LTE: Internal or External antenna (depending on version) 	<ul style="list-style-type: none"> • LoRa: External antenna • WiFi: Internal antenna • LTE: Internal or External antenna (depending on version)
Ingress Protection	IP30	IP30
Enclosure Material	Plastic (PC+ABS)	Plastic (PC+ABS)
Dimensions (Gateway Only)	166 mm x 127.5 mm x 36 mm	166 mm x 127.5 mm x 36 mm
Operating Temperature	-10° C to +55° C	-10° C to +55° C
Storage Temperature	-40° C to +85° C	-40° C to +85° C
Operating Humidity	0-95% RH (non-condensing)	0-95% RH (non-condensing)
Storage Humidity	0-95% RH (non-condensing)	0-95% RH (non-condensing)
Installation Methods	Desktop, Wall (via included bracket), Rail (via included bracket)	Desktop, Wall (via included bracket), Rail (via included bracket)



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