

# RAK7249 Macro Outdoor Gateway

[doc.rakwireless.com/datasheet/rakproducts/rak7249-macro-outdoor-gateway](https://doc.rakwireless.com/datasheet/rakproducts/rak7249-macro-outdoor-gateway)



**Figure 1:** RAK7249 Macro Outdoor Gateway

## **Product Description**

**RAK7249 Macro Outdoor Gateway** is an ideal product for IoT commercial deployment. Its modularity and customization options allow for flexibility when deploying a solution. With its industrial-grade components, it achieves a high standard of reliability.

The Gateway provides for a solid out of the box experience for quick deployment. Additionally, since its software and UI sits on top of OpenWRT it is perfect for the development of custom applications (via the open SDK).

Thus the RAK7249 is suited for any use case scenario, be it rapid deployment or customization with regards to UI and functionality.

## **Product Features**

---

### **Hardware**

---

1. **IP67/NEMA-6** industrial grade enclosure with cable glands
2. **PoE (802.3 af)** + Surge Protection
3. Dual LoRa Concentrators for up to **16 channels**
4. **Backhaul:** Wi-Fi, LTE and Ethernet
5. **GPS**
6. Up to **5 hours of autonomous work** on battery (Battery + Solar Kit optional)

### **Software**

---

1. Built-in LoRa Server (**up to 128 LoRa nodes license included, higher tiers require a fee**)
2. OpenVPN
3. Software and UI sit on top of **OpenWRT**
4. LoRaWAN® 1.0.2
5. **LoRa Frame filtering** (node whitelisting)
6. **MQTT v3.1** Bridging with **TLS** encryption
7. **Buffering of LoRa frames** in case of NS outage (no data loss)