

# wAP LR9G kit & R11e-LR9G

concentrator gateway card for LoRa®

# Affordable, powerful LoRa<sup>®</sup> solutions – now with enhanced 915 MHz sensitivity and built-in GPS

MikroTik's loT portfolio expands with two new entries for the US and other 915 MHz markets: the wAP LR9G kit, a weatherproof gateway for LoRa<sup>®</sup> outdoor use, and the R11e-LR9G, a miniPCle concentrator card with built-in GPS and upgraded sensitivity.

These tools bring long-range, low-power connectivity within everyone's reach – perfect for smart agriculture, industrial telemetry, and DIY IoT setups.

## wAP LR9G kit:

## **Outdoor-Ready and Versatile**

The wAP LR9G kit is a rugged, out-of-the-box LoRa® gateway built into MikroTik's proven wAP form factor. It features:

- LoRa<sup>®</sup> 915 MHz support
- Built-in GPS (via MT3337V)
- Improved Rx sensitivity: up to -141 dBm
- 2.4 GHz Wi-Fi (802.11b/g/n dual-chain)
- Passive PoE support and wide voltage input range
- 3 power input options: PoE, automotive, or DC jack
- SMA female connectors for external antenna options



An out-of-the-box gateway solution

Pair it with any public or private LoRa<sup>®</sup> network (including The Things Network or The Things Industries) using the preinstalled UDP packet forwarder.

Whether you're deploying smart irrigation in a field or setting up a LoRa<sup>®</sup> node on a building rooftop – this device is made to withstand the elements and simplify setup.

## R11e-LR9G: GPS-Enabled miniPCle LoRa<sup>®</sup> Card

The R11e-LR9G is a next-generation concentrator card for LoRa<sup>®</sup> networks, compatible with any MikroTik device that has a miniPCle slot and USB lines. It includes:

- 915 MHz LoRa<sup>®</sup> support (AU915–928, US902–928, AS923, KR920–923)
- GPS support (MT3337V interface)
- Enhanced receive sensitivity: -141 dBm
- Max power consumption: 1.3 W
- Standard miniPCle form factor



Enables LoRa<sup>®</sup> connectivity for any MikroTik product that has an mPCle slot with connected USB lines

Now with GPS on board, the R11e-LR9G is ideal for mobile LoRa<sup>®</sup> base stations, vehicle tracking solutions, or precision deployment scenarios that benefit from time-sync or geolocation.

### **Practical Use Cases**



#### Smart agriculture

Track soil moisture, livestock, or crop conditions with LoRa® sensors across vast land – using GPS to log location-specific data.



#### Industrial sensor networks

Connect temperature, humidity, flow, or pressure sensors across facilities without running expensive cabling.



#### Fleet and mobile gateway setups

Embed R11e-LR9G into a device with miniPCle to deploy mobile LoRa® gateways with position tracking.



#### **City-wide telemetry**

Combine long-range LoRa® with GPS to manage and track assets like streetlights, trash bins, or air quality monitors in smart city rollouts.

## • wAP LR9G kit specifications

Product code	RBwAPR-2nD&R11e-LR9G
CPU	Single-core QCA9531 600 MHz
CPU architecture	MIPSBE
Size of RAM	64 MB
RAM type	DDR2
Storage	16 MB, Flash
Number of 100M Ethernet ports	1
MiniPCIe slots	1
Wireless	2.4 GHz
Protocols	802.11b/g/n
Wireless interface model	QCA9531
Antenna gain	2 dBi
Antenna beam width	360°
Antenna connector	SMA female
GNSS interface model	MT3337V
GNSS standard	GPS
LoRa band	915 MHz
Max Rx sensitivity	-141 dBm
Dimensions	185 x 85 x 30 mm
Operating system	RouterOS v7, License level 4
Operating temperature	-40°C to +60°C

## • wAP LR9G kit powering

Number of DC inputs	3 (PoE-In, Automotive, DC jack)
PoE-In input Voltage	9-28 V
Automotive input Voltage	12-30 V
DC jack input Voltage	9-28 V
Power adapter nominal voltage	24 V
Power adapter nominal current	0.8 A
PoE-In	Passive PoE
Max power consumption	7 W

## • wAP LR9G kit wireless specifications

Rate (2.4 GHz)	Tx (dBm)	<b>Receive Sensitivity</b>
1MBit/s	22	-96
11MBit/s	22	-89
6MBit/s	20	-93
54MBit/s	18	-74
MCS0	20	-93
MCS7	16	-71

### • wAP LR9G kit included parts











24 V 0.8 A power adapter

Gigabit PoE injector

Fastening set

Desktop stand

Outdoor case bracket



## • R11e-LR9G specifications

Product code	R11e-LR9G
MCU model	GD32L233RCT6
GNSS interface model	MT3337V
GNSS standard	GPS
LoRa band	915 MHz
Max Rx sensitivity	-141 dBm
Max power consumption	1.3 W
Operating temperature	-40°C to +70°C