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# MikroTik IoT Updates: Reliable LoRa® Solutions at an Even Better Price

## wAP LR8G kit

A **compact, weatherproof outdoor gateway** for LoRa® technology. The updated **868MHz LoRa® module** extends your range and improves the reliability of the whole setup —even in rough conditions. This versatile device also includes:

- Built-in GPS
- A 2.4 GHz WiFi interface and Ethernet port for seamless integration.
- Durable design, tested to perform in various weather conditions.

## LtAP LR8G LTE6 kit

A **rugged all-in-one device** for IoT connectivity, ideal for industrial or public use. Perfect for **transportation projects** or **logistics**, the LtAP LR8G LTE6 Kit combines:



- LoRa<sup>®</sup> connectivity, LTE, and GPS for maximum versatility.
  The external antenna connectors are "SMA female".
- Dual-chain 2.4 GHz WiFi for added flexibility.
- A tough, robust enclosure built for industrial and mobile setups.
- Mini SIM slot and a built-in modern LTE6 modem for fast and responsive mobile connectivity
- Strong 868MHz Rx performance for effective long-range communication.
- Many powering options, including automotive.

## R11e-LR8G card

The simplest way to add **LoRa® connectivity** to any MikroTik device with a mini PCIe slot. Perfect for tight budgets without compromising performance, this card features:

- Compact, efficient design for easy integration into existing setups.
- Cost-effective performance for IoT projects of any scale.
- Support of 8 different channels, Listen Before Talk (LBT) and spectral scan features.



#### **The Things Network**

Our products for LoRa<sup>®</sup> are ready to work with <u>"The Things Network"</u> - the famous open source infrastructure that provides free LoRa<sup>®</sup> network coverage and has tons of apps for your needs. With the help of "The Things Network" you can get started with the Internet-of-things within a day. And it is easily upgradable to enterprise-grade network <u>"The Things Industries"</u>.

The setup is so easy - anyone can learn it. No need to reinvent the wheel – join "The Things Network" to save time and energy with smart solutions!

#### wAP LR8G kit specifications

Product code	RBwAPR-2nD&R11e-LR8G
CPU	Single-core QCA9531 600 MHz
CPU architecture	MIPSBE
Size of RAM	64 MB
RAM type	DDR2
Storage	16 MB, NAND
Number of 100M Ethernet ports	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
Dimensions	185 x 85 x 30 mm
Operating system	RouterOS v7, License level 4
Operating temperature	-40°C to +60°C

#### wAP LR8G 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 LR8G kit wireless specifications

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

## • wAP LR8G kit included parts











24 V 0.8 A power adapter

Gigabit PoE injector

Fastening set

Desktop stand

Outdoor case bracket



### LtAP LR8G LTE6 kit Specifications

Product code	LtAP-2HnD&FG621-EA&LR8G	
CPU	Dual-core MT7621AT 880 MHz	
CPU architecture	MMIPS	
Size of RAM	128 MB	
RAM type	DDR3	
Storage	16 MB, Flash	
Number of 1G Ethernet ports	1	
SIM slots	3 Mini SIM	
Wireless interface model	AR9342	
Wireless	2.4 GHz 802.11b/g/n dual-chain	
Antenna gain	2.5 dBi	
Antenna connector	SMA female (GPS, LoRa)	
LoRa band	868MHz	
GNSS interface model	MT3337V	
LTE modem	R11eL-FG621-EA	
TAC	86335904	
LTE Category	6 (300Mbit/s Downlink, 50Mbit/s Uplink)	
MIMO DL	2x2	
MIMO UL	1x1	
LTE FDD bands	1 (2100 MHz) / 3 (1800 MHz) / 5 (850 MHz) / 7 (2600 MHz) / 8 (900 MHz) / 20 (800 MHz) / 28 (700 MHz)	
LTE TDD bands	38 (2600MHz) / 40 (2300MHz) / 41 (2500MHz)	
3G Category	R8 (42.2Mbps Downlink, 11.2Mbps Uplink)	
3G bands	1 (2100MHz) / 3 (1800MHz) / 5 (850MHz) / 8 (900MHz)	
Dimensions	170 x 162 x 40 mm	
Operating system	RouterOS v7 only	
Operating temperature	-40°C to +70°C	

### • LtAP LR8G LTE6 kit Certification & Approvals

Certification	CE, FCC, IC, E-MARK, EAC, ROHS
IP	IP54

## • LtAP LR8G LTE6 kit Powering

Number of DC inputs	3 (PoE-In, Automotive, DC jack)
PoE-In input Voltage	12-30 V
Automotive input Voltage	12-27 V
DC jack input Voltage	12-30 V
Power adapter nominal voltage	24∨
Power adapter nominal current	1.2 A
PoE-In	Passive PoE
Max power consumption (without attachments)	12 W
Max power consumption	24 W

### • LtAP LR8G LTE6 kit Wireless specifications

Rate (2.4 GHz)	Tx (dBm)	<b>Receive Sensitivity</b>
1MBit/s	25	-100
11MBit/s	25	-94
6MBit/s	26	-96
54MBit/s	23	-78
MCS0	26	-96
MCS7	22	-73

## LtAP LR8G LTE6 kit Included parts









Screw set

Automotive cable

#### • R11e-LR8G Specifications

Product code	R11e-LR8G	
Interface	Mini-PCle	
Baseband chip	SX1302	
Listen before talk	Yes	
Support class	A and C	
Frequency	863-870 MHz (EU863-870, RU864-870, IN865-867)	
RF Output power	863-870MHz up to 27dBm (depending on region, limited up to 14dBm for EU)	
Receive max sensitivity	-139 dBm	
GPS receiver	Yes	
Range	Up to 15 km in rural enviroment and up to 2 km in urban enviroment when using MikroTik LoRa® 6.5 dBi antenna kit	
Operating temperature	-40°C to +70°C	
Max power consumption	1.3 W	