

# Chateau LTE12

One router to delight them all – introducing the ultimate home AP with LTE support

Let's face it – most of the standard issue access points can't really satisfy the extremely diverse client base – they either lack features, users want more speed and higher gain, the price is too high or they look weird. We decided to take all the aspects that are important for most home users and created a single device that will make them happy – this is the MikroTik Chateau.



It is a high-speed, dual-band home access point with CAT12 LTE – for really fast Internet anywhere, anytime. But LTE is not the only option – Chateau also features 5 x Gigabit Ethernet ports and a full size USB port.

#### Perfect for busy homes

Strong dual-chain dual-band 2.4/5 GHz wireless for concurrent coverage will solve most interference issues in a crowded environment. For example, a client can simultaneously use the 2.4 GHz channel for all household mobile devices and reserve the 5 GHz channel for tasks that are sensitive to packet loss – such as streaming high-quality videos.

#### Built with security in mind

Not only our RouterOS software comes with robust security options, we also focus on the production security. There is no outsourcing, every device is assembled in our premises and all the components come from reputable, trusted partners – such as Qualcomm. We cooperate with European law-makers and work hard to ensure full compliance with all the necessary safety policies. MikroTik is all about smooth, long-term cooperation without surprises.



Chateau has 4 powerful (4x4 MIMO compatible!) integrated antennas , but you can connect 2 external LTE antennas (not included) for even stronger

Let's make more clients happy with MikroTik Chateau!

#### Enjoy all the benefits of LTE Category 12 networking!

Reach speeds of up to **600 Mbps** with carrier aggregation, as CAT12 allows devices to use three bands at the same time. That is a huge advantage when there are a lot of LTE users in the area. Chateau LTE12 provides better responsiveness in a crowded environment and higher efficiency for weaker signal situations in the countryside. Depending on the service provider, we have seen Internet speed doubling in rural areas after switching to carrier aggregation, so there is no need to wait for cable network expansions.



# **Specifications**

Product code	RBD53G-5HacD2HnD-TC&EG12-EA
CPU	4 core IPQ-4019 716 MHz
Size of RAM	256 MB
Storage	16 MB flash
Number of 1 GbE Ethernet ports	5
Wireless	2.4 GHz 802.11b/g/n dual-chain, 5 GHz 802.11a/n/ac dual-chain
Wireless regulations	Specific frequency range will be limited by country regulations
Wireless antenna max gain	2.4 GHz (3 dBi), 5 GHz (5.5 dBi)
LTE category	12 (600 Mbps Downlink, 150 Mbps Uplink), the LTE chip is built-in, 4x4 MIMO LTE support
LTE antenna max gain	4 dBi, option for external SMA conector
LTE bands	1/3/5/7/8/20/28/38/40/41
LTE max speed	600 Mbps
LTE carrier aggregation	Yes
Antenna beam width	360°
Supported input voltage	DC jack 12 - 28 V
Dimensions	240 x 156 x 44 mm
Operating temperature	-40°C to +70°C
Operating system	RouterOS 7.0 (compatible only with v7 and above)
Micro SIM slots	1
USB port	1 USB 2.0 port type A
Max power consumption	23 W

# Wireless specifications

Rate (2.4 GHz)	Tx (dBm)	<b>Receive Sensitivity</b>	Rate (5 GHz)	Tx (dBm)	<b>Receive Sensitivity</b>
1MBit/s	25	-100	6MBit/s	26	-96
11MBit/s	25	-94	54MBit/s	22	-80
6MBit/s	26	-96	MCS0	26	-96
54MBit/s	23	-78	MCS7	21	-75
MCS0	26	-96	MCS9	19	-70
MCS7	22	-73			



#### Supported LTE bands

#### Modem specification

Downlink (DL) / Uplink (UL)	256 QAM / 64 QAM
LTE (FDD) bands	1(2100)/3(1800)/5(850)/7(2600)/8(900)/20(800)/28(700)
LTE (TDD) bands	38(2600)/40(2300)/41(2600)
WCDMA bands	1 (2100)/3(1800)/5(850)/8(900)

## Supported 2×CA (UL) LTE bands

B3+B3	B40+B40
B7+B7	D41+D41
B38+B38	B41+B41

## Supported 2×CA (DL) LTE bands

B1+B1/B3/B5/B7/B8/B20/B28/B38/B40/B41	B38+B38
B3+B3/B5/B7/B8/B20/B28/B38/B40/B41	B40+B40
B7+B5/B7/B8/B20/B28	D 44 - D 44
B20+B38/B40	B41+B41

## Supported 3xCA (DL) LTE bands

B1+B3+B3/B5/B7/B8/B20/B28/B38/B41	B3+B40+B40
B1+B40+B40	B3+B41+B41
B1+B41+B41	B7+B7+B20/B28
B1+B7+B20	B40+B40+B40
B3+B3+B7/B20/B28	41+B41+B41
B3+B7+B7/B8/B20/B28	4170417041

## Supported DL 4×4 MIMO LTE bands

LTE-FDD: B1/B3/B7



# Included parts



24 V 1.2 A power adapter

## **IPsec test results**

RBD53G-5HacD2HnD-TC&EG12-EA		IPQ-4018 IPsec throughput						
Mode	Configuration	1400 byte		512 byte		64 byte		
		kpps	Mbps	kpps	Mbps	kpps	Mbps	
Single tunnel	AES-128-CBC + SHA1	37.9	424.5	59	241.7	61.6	31.5	
256 tunnels	AES-128-CBC + SHA1	36	403.2	38.5	157.7	39.8	20.4	
256 tunnels	AES-128-CBC + SHA256	36	403.2	38.5	157.7	39.8	20.4	
256 tunnels	AES-256-CBC + SHA1	34.4	385.3	37.9	155.2	39.8	20.4	
256 tunnels	AES-256-CBC + SHA256	34.4	385.3	37.9	155.2	39.8	20.4	

### Ethernet test results

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Mode	Configuration	1518 byte	1518 byte		512 byte		64 byte	
		kpps	Mbps	kpps	Mbps	kpps	Mbps	
Bridging	none (fast path)	162,5	1973.4	469,9	1924.7	1484,8	760.2	
Bridging	25 bridge filter rules	162,5	1973.4	352,9	1445.5	359,2	183.9	
Routing	none (fast path)	162,5	1973.4	469,9	1924.7	1488,0	761.9	
Routing	25 simple queues	162,5	1973.4	469,9	1924.7	506,3	259.2	
Routing	25 ip filter rules	162,5	1973.4	240,8	986.3	242,9	124.4	