

Company: MikroTik

Test of: RBLHG-5HPnD Wireless Module

To: FCC CFR 47 Part 1.1310

Report No.: MIKO62-U2\_MPE Rev A

**MPE/RF EXPOSURE TEST REPORT**



# MPE/RF EXPOSURE TEST REPORT

FROM



Test of: MikroTik RBLHG-5HPnD Wireless Module

To: FCC CFR 47 Part 1.1310

Test Report Serial No.: MIKO62-U2\_MPE Rev A

This report supersedes: NONE

Applicant: MikroTik  
Pernavas 46  
Riga LV 1009  
Latvia

Product Function: WLAN Access Point

Issue Date: 26<sup>th</sup> October 2017

## **This Test Report is Issued Under the Authority of:**

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## 1. MAXIMUM PERMISSIBLE EXPOSURE

### Calculations for Maximum Permissible Exposure Levels

$$\text{Power Density} = P_d \text{ (mW/cm}^2\text{)} = \text{EIRP}/(4*\pi*d^2)$$

$$\text{EIRP} = P * G$$

P = Peak output power (mW)

G = Antenna numeric gain (numeric)

d = Separation distance (cm)

$$\text{Numeric Gain} = 10 ^ (G \text{ (dBi)}/10)$$

The calculations in the following table use the highest conducted power values together with the lowest antenna gain specified for the EUT. These calculations represent worst case in terms of the exposure levels.

The transmitters cannot operate simultaneously

Freq. Band (MHz)	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Power Density (mW/cm <sup>2</sup> ) @ 20cm	Power Density Limit (mW/cm <sup>2</sup> )	Min Calculated safe distance for Limit (cm)	Calculated Power Density (mW/cm <sup>2</sup> ) @ Safe Distance
5725.0 - 5850.0	9.00	7.94	22.60	181.97	0.29	1.00	10.72	1.00
5150.0 - 5250.0	9.00	7.94	20.76	119.11	0.19	1.00	8.68	1.00
5725.0 - 5850.0	27.00	501.19	8.60	7.24	0.72	1.00	17.00	1.00
5150.0 - 5250.0	27.00	501.19	8.76	7.52	0.75	1.00	17.31	1.00

Note: for mobile or fixed location transmitters, the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

### Specification - Maximum Permissible Exposure Limits

The Limit is defined in Table 1 of FCC §1.1310.



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