

Company: MikroTik

Assessment of: MikroTik RBOmniTikPG-5HacD

To: FCC CFR 47 §1.1310 Exposure Limits

Report No.: MIKO51-MPE

**MPE TEST REPORT**



# MPE TEST REPORT

FROM



Assessment of: MikroTik RBOmniTikPG-5HacD

to

To: FCC CFR 47 §1.1310 Exposure Limits

Test Report Serial No.: MIKO51 - OmniTIK 5 PoE ac FCC IC EU

This report supersedes: NONE

Applicant: MikroTik  
Aizkraukles iela 23  
Riga, LV 1006  
Latvia

Product Function: Wireless Access Point

Issue Date: 7th October 2016

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

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## 1. MAXIMUM PERMISSABLE 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)

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

Because the EUT belongs to the General Population/Uncontrolled Exposure the limit of power density is  $1.0 \text{ mW/cm}^2$

The calculations in the table below 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.

Freq. Band (MHz)	Ant Gain (dBi)	Numeric Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Calculated Safe Distance @ $1\text{mW/cm}^2$	Calculated Power Density @ 20cm	Minimum Separation Distance (cm)
5725.0 - 5850.0	7.50	5.62	25.99	396.90	13.33	0.44	20.00
5150.0 – 5250.0	7.50	5.62	15.44	34.99	3.96	0.04	20.0

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



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**Page:** 4 of 5

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**Specification**  
**Maximum Permissible Exposure Limits**

**FCC §1.1310** Limit =  $1\text{mW} / \text{cm}^2$  from 1.310 Table 1

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