



MPE/RF EXPOSURE REPORT

Company: Mikrotiks SIA (MikroTik)

Evaluation of: RBD25G-5HPacQD2HPnD-US

To: FCC CFR 47 Part 1.1310

Report No.: MIKO81 RBD25G-5HPacQD2HPnD-US FCC
MPE Rev A

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FROM



Evaluation of: Mikrotikls SIA (MikroTik) RBD25G-5HPacQD2HPnD-US (Audience)

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This report supersedes: NONE

Applicant: Mikrotikls SIA (MikroTik)
Brivibas gatve 214i
Riga, LV-1039
Latvia

Product Function: 802.11a/b/g/n/ac WLAN router + LTE
Customer Premises Equipment

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This 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)

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

The calculations in the table below use the highest conducted power values together with the 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 Power Density (mW/cm ²) @ 20cm | Power Density Limit (mW/cm ²) | Min Calculated safe distance for Limit (cm) |
|------------------|----------------|------------------------|-------------------------|------------------------|---|---|---|
| 5150.0 - 5250.0 | 2.50 | 1.78 | 27.53 | 566.24 | 0.200 | 1.00 | 8.951 |
| 2400.0 - 2483.5 | 3.50 | 2.24 | 19.5 | 89.13 | 0.040 | 1.00 | 3.985 |
| 5725.0 - 5850.0 | 4.50 | 2.82 | 26.57 | 453.94 | 0.255 | 1.00 | 10.090 |

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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