



MPE/RF EXPOSURE REPORT

FCC CFR 47 Part 1.1310

MIKO101-U12 MPE FCC Rev A

Company: Mikrotiks SIA (MikroTik)

Model Name: RB921GS-5HPacD-15S-US,
RB921GS-5HPacD-19S-US

MPE/RF EXPOSURE REPORT

FROM



Company: Mikrotiks SIA (MikroTik)

Model: RB921GS-5HPacD-15S-US, RB921GS-5HPacD-19S-US

To: FCC CFR 47 Part 1.1310

Report Serial No.: MIKO101-U12 MPE FCC Rev A

This report supersedes: NONE

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

Issue Date: 17th September 2020

This Report is Issued Under the Authority of:

MiCOM Labs, Inc.
575 Boulder Court
Pleasanton California 94566
USA
Phone: +1 (925) 462-0304
Fax: +1 (925) 462-0306
www.micomlabs.com



MiCOM Labs is an ISO 17025 Accredited Testing Laboratory

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)

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 mW/cm²

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)
5250.0 - 5350.0	15.00	31.62	8.32	6.79	0.04	1.00	4.2
5470.0 - 5725.0	15.00	31.62	11.90	15.49	0.10	1.00	6.3
5250.0 - 5350.0	19.00	79.43	5.92	3.91	0.06	1.00	5.0
5470.0 - 5725.0	19.00	79.43	7.64	5.81	0.09	1.00	6.1

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

FCC §1.1310 Limit = 1mW / cm² from 1.310 Table 1



575 Boulder Court
Pleasanton, California 94566, USA
Tel: +1 (925) 462 0304
Fax: +1 (925) 462 0306
www.micomlabs.com