



RF Exposure Report

Prepared for Novanta

This report presents Maximum Permissible Exposure for
M7e-Pico / M7e-Petite

Prepared by

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Engineer

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This test result relates only to the described test object.
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The test is traceable to national standard or related international standard

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• Test Request Information

Test Requested By: Novanta
125 Middlesex Turnpike, Bedford, MA 01730
Bedford, MA 01730

Category of DUT: Mobile Exposure; General Population / Uncontrolled Exposure

Type of Test: RF Exposure Exemption Calculation

References: KDB 447498 v06
FCC CFR Title 47, Chapter I, Subchapter A, Subpart I, Part 2.1091

Deviations from standard: None

Date of Assessment: 03/08/2022

• Test Laboratory Information

Location of Test Lab: Bureau Veritas Consumer Product Services, Inc.
One Distribution Center Circle,
Ste #1,
Littleton, MA 01460, USA

Key Contact: Ozgur Ozturk (General Manager)
Ozgur.Ozturk@BureauVeritas.com

Laboratory Accreditations: BUREAU VERITAS CONSUMER PRODUCTS SERVICES, INC is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.

ISO/IEC 17025:2017: 1627-01

FCC Test Site Number: US1028

IC Test Site Number: US0106

1. RF Exposure

1.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

f = Frequency in MHz; *Plane-wave equivalent power density

1.2 MPE Calculation Formula

$$S = \frac{P_{out}G}{4\pi R^2}$$

Where:

S = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

R = distance between observation point and centre of the radiator in cm

1.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. Therefore this device is classified as Mobile Device.

1.4 Antenna information

Antenna Type	Antenna Gain (dBi)
Dipole	6.15
Patch	6.0

Note:

1. Antenna that led to the highest gain.

1.5 Calculation Result of Single RF Source(s)

Frequency (MHz)	Max Power (dBm)	Max Power (mW)	Turn-Up Tolerance	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
902.75	28.31	680	N/P	6.15	20	0.556	0.60