

RF EXPOSURE EVALUATION REPORT

Applicant: DAN-TECH Co., Ltd.
Manufacturer: DAN-TECH Co., Ltd.
Product: DSCAN-3
Model: DS3-100



Date of issue: December 11, 2023

ATTESTATION STATEMENT

This equipment has been tested in accordance with the standards identified in the referenced test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report and demonstrate that the equipment complies with the appropriate standards.

All JNDL Laboratory. CO., LTD instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

Total number of pages of this test report : 5 pages

Test engineer	Report reviewed by
	
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REVISION HISTORY

Revision	Date	Descriptions
0	December 11, 2023	Original release

Table of Contents

- 1. Description of equipment under test (EUT)**
- 2. FCC Exposure Limits**
- 3. Prediction of MPE limit at given distance**

1 Description of equipment under test (EUT)

Product: DSCAN-3
Model: DS3-100
Serial number: N/A

Technical data:

Technologies	Bandwidth	Max. power output (conducted)	Max. antenna gain	Max. EIRP
2 402 MHz to 2 480 MHz	1 MHz	6.49 dBm	1.99 dBi	8.48 dBm

2 FCC Exposure Limits

2.1. FCC, CFR 47 Section

The table below is excerpted from Table 1 of 47 CFR 1.1310 titled "Limits for Maximum Permissible Exposure (MPE), (ii) Limits for General Population/Uncontrolled Exposure"

Frequency Range (MHz)	Power Density (mW/cm ²)	Averaging Time (minutes)
1 500 – 100 000	1	30

where f = frequency in MHz

NOTE: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

3 Prediction of MPE limit at given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

Linear form $S = PG / 4\pi R^2$

Where: S is the power density (W/m^2)
 P is the power delivered to the antenna (W)
 G is the antenna gain observed in the far-field region (linear)
 R is the distance from antenna to point of interest (m)

Prediction: worst case [under FCC, CFR 47 Section]

Technologies:		Low energy 1 Mbps	
	Frequency	2 402 ~ 2 480	MHz
PG	Declared max power (EIRP)	8.48	dBm
R	Distance	20	cm
S	MPE limit for uncontrolled exposure	1.0	mW/cm ²
	Calculated Power density:	0.001 40	mW/cm²

This prediction demonstrates the following:

The power density levels at a distance of 20 centimeters are below the maximum levels allowed by regulations.