

Report number: SR/2507005

Issue Date: 10.03.2026

RF EXPOSURE EVALUATION REPORT		
Report Number. :	SR/2507005	
Date of issue :	10.03.2026	
Total number of pages :	7	
Sample ID	FCC/2310003	
Testing Laboratory :	Nemko India (Test Lab) Pvt. Ltd.	
Address..... :	Plot no 193, IMT, Sector 68, Faridabad-121004, Haryana, India	
Applicants / Customers Name and Address	MEDHA SERVO DRIVES PVT.LTD P-4/5B, IDA NACHARAM, HYDERABAD, TELANGANA, 500076, INDIA	
Manufacturer's name : Address :	MEDHA SERVO DRIVES PVT.LTD UNIT - III: PLOT NO 8/A, RAVIRYALA VILLAGE, MAHESWARAM MANDAL, RANGA REDDY DISTRICT -501359, TELANGANA, INDIA. UNIT - I: JODIMETLA CROSS ROADS, KORREMULA, GHATKESAR, HYDERABAD - 500088, TELANGANA, INDIA.	
Standard Test Method :	§1.1310 and §2.1091	
Test item description :	DATARADIO	
Trademark :		
Model/Type reference :	MDR4047 (Main Model) MDR4243 (Series Model)	
Date of receipt of test item	09.12.2024	
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1. Test Summary

Sr. No	Test Parameter	Test Requirement	Verdict	Remarks
1	RF EXPOSURE EVALUATION	FCC 1.1310 & 2.1091	EUT Complies the assessment	--



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2. General Information

EUT Peripheral List

No.	Equipment	Manufacturer	Model No.	Serial No.	Power cord	Remark
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Test Peripheral List

No.	Equipment	Manufacturer	Model No.	Serial No.	Power cord	Remark
1	Laptop	Dell	Latitude 3480	--	N/A	N/A

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3. General Description of EUT – based on the information provided by manufacturer.

Manufacturer Name:	MEDHA SERVO DRIVES PVT. LTD
Manufacturer address:	UNIT - III: PLOT NO 8/A, RAVIRYALA VILLAGE, MAHESWARAM MANDAL, RANGA REDDY DISTRICT –501359, TELANGANA, INDIA. UNIT - I: JODIMETLA CROSS ROADS, KORREMULA, GHATKESAR, HYDERABAD - 500088, TELANGANA, INDIA.
Product:	DATARADIO
Main Model:	MDR4047
Trademark:	
Serial Number:	2067
Hardware Number:	6.02.2
Software Number:	6.02.2
Frequency Band/ Supported Bands:	406.125 MHz to 469.975 MHz
Rating:	24 VDC
RF power Max (W)	10 W
Antenna Gain	2.0 dBi
FCC ID:	2BDAA-DATARADIO
Federal Registration Number (FRN):	0034384974

4. FCC Maximum Permissible Exposure (MPE)

4.1 Introduction

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

4.2 Limits

Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

Frequency Range (MHz)	E-field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)
Limits for Occupational/Controlled Exposure			
0.3-3.0	614	1.63	*100
3.0-30	1842/f	4.89/f	*(900/f ²)
30-300	61.4	0.163	1.0
300-1500	--	--	f/300
1500-100,000	--	--	5

f = frequency in MHz. * = Plane-wave equivalent power density.

4.3 Classification of the assessment methods

Measurements at separation distances down to 200 cm are acceptable dependent on the measurement frequency and measurement equipment.

Warning statement by manufacturer (in user manual) for keeping 200 cm separation distance – ‘People should not be in front of the antenna within 200 cm distance when the transmitter is operating.’

Electric field strength or magnetic field strength in the far-field to the reference field calculated by the far-field Equation:

Power density (s) is (in appropriate units, e.g. mW/cm²)

$$S = \frac{PG}{4 \pi R^2}$$

Where,

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

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4.4 Calculated Data:

Antenna Gain: 2.0 dBi (declared by manufacturer).

Channel and frequency	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Evaluation Distance (cm)	Power density (S) (mW/cm ²)	Power density Limit (mW/cm ²)	Verdict
406.125 MHz	40.34	2.0	200	0.034	1.35	Pass
435.500 MHz	40.53	2.0	200	0.036	1.45	Pass
469.975 MHz	40.92	2.0	200	0.039	1.57	Pass

Note: Maximum Conducted Power are taken from the report no. FCC/2310003 dated August 13, 2025 issued by Nemko India (Test Lab) Pvt. Ltd., Plot no 193, IMT, Sector 68, Faridabad-121004, Haryana, India.

4.5 Result

The device meets MPE requirement at 200 cm distance.

***** End of Test report*****