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 No. 6, Kefeng Road, Science & Technology Park,
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Maximum Permissive Exposure

FCC ID: LTQDHU1
 Product Name: Display Head Unit
 M/N: DHU 1.0

1. According to FCC CFR 47 §1.1310, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 Limits for Maximum Permissible Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational / Control Exposures (f = frequency)				
30-300	61.4	0.163	1.0	6
300-1500	---	---	f/300	6
1500-100,000	---	---	5.0	6
(B) Limits for General Population / Uncontrolled Exposures (f = frequency)				
30-300	27.5	0.073	0.2	30
300-1500	---	---	f/1500	30
1500-100,000	---	---	1.0	30

2. MPE Calculation

APTIV Services Deutschland GmbH declares that the product described above has been evaluated and found to comply with the RF exposure limits for humans, as specified based on ANSI/FCC recommendation.

RF Exposure Calculations: $S = (P * G) / (4 * \pi * r^2)$ or $r = \sqrt{(P * G) / (4 * \pi * S)}$

2.1. Estimation Result

Bluetooth

Mode	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	antenna Gain (dBi)	antenna Gain (linear)	MPE (mW/cm ²)
GFSK (DSS)	2402	2.861	1.93	1.6	1.45	0.00056
	2441	1.830	1.52	1.6	1.45	0.00044
	2480	1.190	1.32	1.6	1.45	0.00038
8-DPSK (DSS)	2402	1.919	1.56	1.6	1.45	0.00045
	2441	0.880	1.22	1.6	1.45	0.00035
	2480	0.235	1.06	1.6	1.45	0.00030
GFSK (1Mbps) (DTS)	2402	1.491	1.41	1.6	1.45	0.00041
	2440	1.546	1.43	1.6	1.45	0.00041
	2480	1.738	1.49	1.6	1.45	0.00043
GFSK (2Mbps) (DTS)	2402	1.424	1.39	1.6	1.45	0.00040
	2440	1.416	1.39	1.6	1.45	0.00040
	2480	1.678	1.47	1.6	1.45	0.00042

WiFi 2.4GHz (SISO):

Mode	Frequency (MHz)	PK Output power (dBm)		Output power (mW)		antenna Gain (dBi)		antenna Gain (linear)		MPE (mW/cm ²)	
		ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	ANT1	ANT2
11b (DTS)	2412	12.57	7.81	18.07	6.04	2.4	1.4	1.74	1.38	0.00625	0.00166
	2437	12.55	8.34	17.99	6.82	2.4	1.4	1.74	1.38	0.00622	0.00187
	2462	12.66	8.28	18.45	6.73	2.4	1.4	1.74	1.38	0.00638	0.00185
11g (DTS)	2412	8.00	7.32	6.31	5.40	2.4	1.4	1.74	1.38	0.00218	0.00148
	2437	8.26	7.79	6.70	6.01	2.4	1.4	1.74	1.38	0.00232	0.00165
	2462	8.22	7.81	6.64	6.04	2.4	1.4	1.74	1.38	0.00230	0.00166
11n HT20 (DTS)	2412	8.53	8.31	7.13	6.78	2.4	1.4	1.74	1.38	0.00247	0.00186
	2437	9.15	8.59	8.22	7.23	2.4	1.4	1.74	1.38	0.00284	0.00199
	2462	8.82	8.60	7.62	7.24	2.4	1.4	1.74	1.38	0.00264	0.00199
11n HT40 (DTS)	2422	8.96	8.84	7.87	7.66	2.4	1.4	1.74	1.38	0.00272	0.00210
	2437	9.52	9.10	8.95	8.13	2.4	1.4	1.74	1.38	0.00310	0.00223
	2452	9.36	9.32	8.63	8.55	2.4	1.4	1.74	1.38	0.00299	0.00235
11ax HE20 (DTS)	2412	6.41	5.81	4.38	3.81	2.4	1.4	1.74	1.38	0.00151	0.00105
	2437	6.69	6.32	4.67	4.29	2.4	1.4	1.74	1.38	0.00161	0.00118
	2462	6.65	6.29	4.62	4.26	2.4	1.4	1.74	1.38	0.00160	0.00117
11ax HE40 (DTS)	2422	6.39	5.92	4.36	3.91	2.4	1.4	1.74	1.38	0.00151	0.00107
	2437	6.67	6.30	4.65	4.27	2.4	1.4	1.74	1.38	0.00161	0.00117
	2452	6.64	6.18	4.61	4.15	2.4	1.4	1.74	1.38	0.00160	0.00114



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WiFi 2.4GHz (MIMO):

Mode	Frequency (MHz)	PK Output power (dBm)	Output power (mW)	antenna Gain (dBi)	antenna Gain (linear)	MPE (mW/cm ²)
11n HT20 (DTS)	2412	10.75	11.89	1.9	1.55	0.00366
	2437	11.11	12.91	1.9	1.55	0.00398
	2462	11.08	12.82	1.9	1.55	0.00395
11n HT40 (DTS)	2422	9.49	8.89	1.9	1.55	0.00274
	2437	9.90	9.77	1.9	1.55	0.00301
	2452	9.79	9.53	1.9	1.55	0.00294
11ax HE20 (DTS)	2412	9.42	8.75	1.9	1.55	0.00270
	2437	9.84	9.64	1.9	1.55	0.00297
	2462	9.73	9.40	1.9	1.55	0.00290
11ax HE40 (DTS)	2422	9.50	8.91	1.9	1.55	0.00275
	2437	9.89	9.75	1.9	1.55	0.00301
	2452	9.75	9.44	1.9	1.55	0.00291

WiFi 5GHz (SISO):

Mode	Frequency (MHz)	PK Output power (dBm)		Output power (mW)		antenna Gain (dBi)		antenna Gain (linear)		MPE (mW/cm ²)	
		ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	ANT1	ANT2
11a (U-NII-1)	5180	10.03	7.51	10.07	5.64	1.8	2.6	1.51	1.82	0.00303	0.00204
	5200	9.87	7.58	9.71	5.73	1.8	2.6	1.51	1.82	0.00292	0.00207
	5240	9.48	6.79	8.87	4.78	1.8	2.6	1.51	1.82	0.00267	0.00173
11n HT20 (U-NII-1)	5180	9.87	10.82	9.71	12.08	1.8	2.6	1.51	1.82	0.00292	0.00437
	5200	9.71	10.67	9.35	11.67	1.8	2.6	1.51	1.82	0.00282	0.00423
	5240	9.28	10.24	8.47	10.57	1.8	2.6	1.51	1.82	0.00255	0.00383
11n HT40 (U-NII-1)	5190	8.35	11.18	6.84	13.12	1.8	2.6	1.51	1.82	0.00206	0.00475
	5230	7.94	10.86	6.22	12.19	1.8	2.6	1.51	1.82	0.00187	0.00442
11ac VHT20 (U-NII-1)	5180	9.82	10.82	9.59	12.08	1.8	2.6	1.51	1.82	0.00289	0.00437
	5200	9.66	10.65	9.25	11.61	1.8	2.6	1.51	1.82	0.00279	0.00421
	5240	9.29	10.29	8.49	10.69	1.8	2.6	1.51	1.82	0.00256	0.00387
11ac VHT40 (U-NII-1)	5190	10.81	11.16	12.05	13.06	1.8	2.6	1.51	1.82	0.00363	0.00473
	5230	10.57	9.78	11.40	9.51	1.8	2.6	1.51	1.82	0.00344	0.00344
11ac VHT80 (U-NII-1)	5210	10.68	10.88	11.69	12.25	1.8	2.6	1.51	1.82	0.00352	0.00444
11ax HE20 (U-NII-1)	5180	10.00	9.87	10.00	9.71	1.8	2.6	1.51	1.82	0.00301	0.00352
	5200	9.86	10.84	9.68	12.13	1.8	2.6	1.51	1.82	0.00292	0.00439
	5240	9.45	10.50	8.81	11.22	1.8	2.6	1.51	1.82	0.00265	0.00406
11ax HE40 (U-NII-1)	5190	10.73	11.05	11.83	12.74	1.8	2.6	1.51	1.82	0.00356	0.00461
	5230	10.45	10.71	11.09	11.78	1.8	2.6	1.51	1.82	0.00334	0.00427
11ax HE80 (U-NII-1)	5210	10.59	10.89	11.46	12.27	1.8	2.6	1.51	1.82	0.00345	0.00445



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		ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	ANT1	ANT2	ANT1	ANT2
11a (U-NII-3)	5745	8.32	8.35	6.79	6.84	2.1	2.2	1.62	1.66	0.00219	0.00226
	5785	7.85	7.43	6.10	5.53	2.1	2.2	1.62	1.66	0.00197	0.00183
	5825	6.96	6.53	4.97	4.50	2.1	2.2	1.62	1.66	0.00160	0.00149
11n HT20 (U-NII-3)	5745	11.72	11.74	14.86	14.93	2.1	2.2	1.62	1.66	0.00480	0.00493
	5785	11.17	11.00	13.09	12.59	2.1	2.2	1.62	1.66	0.00423	0.00416
	5825	10.59	10.18	11.46	10.42	2.1	2.2	1.62	1.66	0.00370	0.00344
11n HT40 (U-NII-3)	5755	10.03	11.99	10.07	15.81	2.1	2.2	1.62	1.66	0.00325	0.00522
	5795	9.53	11.45	8.97	13.96	2.1	2.2	1.62	1.66	0.00290	0.00461
11ac VHT20 (U-NII-3)	5745	11.75	11.72	14.96	14.86	2.1	2.2	1.62	1.66	0.00483	0.00491
	5785	11.23	10.99	13.27	12.56	2.1	2.2	1.62	1.66	0.00428	0.00415
	5825	10.62	10.20	11.53	10.47	2.1	2.2	1.62	1.66	0.00372	0.00346
11ac VHT40 (U-NII-3)	5755	12.56	11.99	18.03	15.81	2.1	2.2	1.62	1.66	0.00582	0.00522
	5795	12.12	11.46	16.29	14.00	2.1	2.2	1.62	1.66	0.00526	0.00462
11ac VHT80 (U-NII-3)	5775	12.10	11.53	16.22	14.22	2.1	2.2	1.62	1.66	0.00524	0.00470
11ax HE20 (U-NII-3)	5745	11.93	11.46	15.60	14.00	2.1	2.2	1.62	1.66	0.00503	0.00462
	5785	11.45	10.80	13.96	12.02	2.1	2.2	1.62	1.66	0.00451	0.00397
	5825	10.69	10.08	11.72	10.19	2.1	2.2	1.62	1.66	0.00378	0.00336
11ax HE40 (U-NII-3)	5755	12.45	11.85	17.58	15.31	2.1	2.2	1.62	1.66	0.00567	0.00506
	5795	12.02	11.33	15.92	13.58	2.1	2.2	1.62	1.66	0.00514	0.00449
11ax HE80 (U-NII-3)	5775	12.13	11.54	16.33	14.26	2.1	2.2	1.62	1.66	0.00527	0.00471



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11n HT20 (U-NII-1)	5180	11.17	13.09	2.2	1.66	0.00432
	5200	11.09	12.85	2.2	1.66	0.00425
	5240	10.61	11.51	2.2	1.66	0.00380
11n HT40 (U-NII-1)	5190	11.47	14.03	2.2	1.66	0.00463
	5230	11.01	12.62	2.2	1.66	0.00417
11ac VHT20 (U-NII-1)	5180	11.58	14.39	2.2	1.66	0.00475
	5200	11.54	14.26	2.2	1.66	0.00471
	5240	11.12	12.94	2.2	1.66	0.00428
11ac VHT40 (U-NII-1)	5190	11.96	15.70	2.2	1.66	0.00519
	5230	11.06	12.76	2.2	1.66	0.00422
11ac VHT80 (U-NII-1)	5210	11.29	13.46	2.2	1.66	0.00445
11ax HE20 (U-NII-1)	5180	8.97	7.89	2.2	1.66	0.00261
	5200	8.99	7.93	2.2	1.66	0.00262
	5240	8.58	7.21	2.2	1.66	0.00238
11ax HE40 (U-NII-1)	5190	9.27	8.45	2.2	1.66	0.00279
	5230	8.89	7.74	2.2	1.66	0.00256
11ax HE80 (U-NII-1)	5210	8.89	7.74	2.2	1.66	0.00256



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11n HT20 (U-NII-3)	5745	12.45	17.58	2.2	1.66	0.00581
	5785	11.82	15.21	2.2	1.66	0.00502
	5825	11.01	12.62	2.2	1.66	0.00417
11n HT40 (U-NII-3)	5755	12.88	19.41	2.2	1.66	0.00641
	5795	12.16	16.44	2.2	1.66	0.00543
11ac VHT20 (U-NII-3)	5745	13.00	19.95	2.2	1.66	0.00659
	5785	12.41	17.42	2.2	1.66	0.00575
	5825	11.68	14.72	2.2	1.66	0.00486
11ac VHT40 (U-NII-3)	5755	13.36	21.68	2.2	1.66	0.00716
	5795	12.84	19.23	2.2	1.66	0.00635
11ac VHT80 (U-NII-3)	5775	12.99	19.91	2.2	1.66	0.00658
11ax HE20 (U-NII-3)	5745	10.41	10.99	2.2	1.66	0.00363
	5785	9.93	9.84	2.2	1.66	0.00325
	5825	9.08	8.09	2.2	1.66	0.00267
11ax HE40 (U-NII-3)	5755	10.71	11.78	2.2	1.66	0.00389
	5795	9.98	9.95	2.2	1.66	0.00329
11ax HE80 (U-NII-3)	5775	10.18	10.42	2.2	1.66	0.00344

Based on safety distance (r) **20cm**, the antenna gain (G) is **1.66 Numerical**, and the highest power output (P) is **21.68mW**, the power density (S) is **0.00716mW/cm²**.