

dBm - volts - watts conversion

(50- ohm system)

dBm	V	W	dBm	V	mW	dBm	mV	∞ W	dBm	μ V	pW
53	99.9	200	0	0.224	1.00	-49	0.79		-98	2.8	
50	70.7	100	-1	0.199	0.79	-50	0.71	.01 μ W	-99	2.51	
49	63.0	79	-2	0.178	0.63	-51	0.63		-100	2.24	.1pw
48	56.2	63	-3	0.158	0.50	-52	0.56		-101	2.0	
47	50.1	50	-4	0.141	0.40	-53	0.50		-102	1.8	
46	44.6	40	-5	0.126	0.32	-54	0.45		-103	1.6	
45	39.8	32	-6	0.112	0.25	-55	0.40		-104	1.41	
44	35.4	25	-7	0.100	0.20	-56	0.35		-105	1.26	
43	31.6	20	-8	0.089	0.16	-57	0.32		-106	1.12	
42	28.2	16	-9	0.079	0.126	-58	0.282		dBm	nV	
41	25.1	12.6	-10	0.071	0.10	-59	0.251		-107	999	
40	22.4	10	-11	0.063		-60	0.224	.001 μ W	-108	890	
39	19.9	8.0	-12	0.056		-61	0.199		-109	793	
38	17.8	6.3	-13	0.050		-62	0.178		-110	707	.01pW
37	15.8	5.0	-14	0.045		-63	0.158		-111	630	
36	14.1	4.0	-15	0.040		-64	0.141		-112	562	
35	12.6	3.2	-16	0.0354		dBm	μV		-113	501	
34	11.2	2.5	dBm	mV		-65	126		-114	446	
33	10.0	2.0	-17	31.6		-66	112		-115	398	
32	8.9	1.6	-18	28.2		-67	100		-116	354	
31	7.9	1.26	-19	25.1		-68	89		-117	316	
30	7.07	1.0	-20	22.4	.01mW	-69	79		-118	282	
dBm	V	mW	-21	19.9		-70	71	.1nW	-119	251	
29	6.30	794	-22	17.8		-71	63		-120	224	.001pW
28	5.62	631	-23	15.8		-72	56		-121	199	
27	5.01	501	-24	14.1		-73	50		-122	178	
26	4.46	398	-25	12.6		-74	45		-123	158	
25	3.98	316	-26	11.2		-75	40		-124	141	
24	3.54	251	-27	10.0		-76	35		-125	126	
23	3.16	200	-28	8.9		-77	32		-126	112	
22	2.82	158	-29	7.9		-78	28		-127	100	
21	2.51	126	-30	7.1	.001mW	-79	25		-128	89	
20	2.24	100	-31	6.30		-80	22.4	.01nW	-129	79	
19	1.99	79	-32	5.6		-81	19.9		-130	71	.1fW
18	1.78	63	-33	5.0		-82	17.8		-131	63	
17	1.58	50	-34	4.5		-83	15.8		-132	56	
16	1.41	40	-35	4.0		-84	14.1		-133	50	
15	1.26	32	-36	3.5		-85	12.6		-134	45	
14	1.12	25	-37	3.2		-86	11.2		-135	40	
13	1.00	20	-38	2.82		-87	10.0		-136	35	
12	0.89	16	-39	2.5		-88	8.9		-137	32	
11	0.79	12.6	-40	2.24	.1 μ W	-89	7.9		-138	28	
10	0.71	10	-41	2.0		-90	7.1	.001nW	-139	25	
9	0.63	8.0	-42	1.8		-91	6.3		-140	22	.01fW
8	0.56	6.3	-43	1.6		-92	5.62				
7	0.501	5.0	-44	1.4		-93	5.0				
6	0.446	4.0	-45	1.26		-94	4.5				
5	0.398	3.2	-46	1.12		-95	4.0				
4	0.354	2.5	-47	1.00		-96	3.54				
3	0.316	2.0	-48	0.89		-97	3.2				
2	0.282	1.6									
1	0.251	.26									