HEROS technology Ltd
general electronics

dBm-Volts-Power conversion table

50 Ohms system

dBm	V	PW	dBm	V	PW	dBm	mV	PW	dBm	µV	PW
+53	100.0	200W	**0**	.225	1.0 mW	**-49**	0.80		**-98**	2.9	
+50	70.7	100W	**-1**	.200	.80 mW	**-50**	0.71	.01 µW	**-99**	2.51	
+49	64.0	80W	**-2**	.180	.64 mW	**-51**	0.64		**-100**	2.25	.1 pW
+48	58.0	64W	**-3**	.160	.50 mW	**-52**	0.57		**-101**	2.0	
+47	50.0	50W	**-4**	.141	.40 mW	**-53**	0.50		**-102**	1.8	
+46	44.5	40W	**-5**	.125	.32 mW	**-54**	0.45		**-103**	1.6	
+45	40.0	32W	**-6**	.115	.25 mW	**-55**	0.40		**-104**	1.41	
+44	32.5	25W	**-7**	.100	.20 mW	**-56**	0.351		**-105**	1.27	
+43	32.0	20W	**-8**	.090	.16 mW	**-57**	0.32		**-106**	1.18	
+42	28.0	16W	**-9**	.080	.125 mW	**-58**	0.286				
+41	26.2	12.5W	**-10**	.071	.10 mW	**-59**	0.251		dBm	nV	
+40	22.5	10W	**-11**	.064		**-60**	0.225	.001 µW	**-107**	1000	
+39	20.0	8W	**-12**	.058		**-61**	0.200		**-108**	900	
+38	18.0	6.4W	**-13**	.050		**-62**	0.180		**-109**	800	
+37	16.0	5W	**-14**	.045		**-63**	0.160		**-110**	710	.01 pW
+36	14.1	4W	**-15**	.040		**-64**	0.141		**-109**	640	
+35	12.5	3.2W	**-16**	.0355					**-112**	580	
+34	11.5	2.5W				dBm	µV		**-113**	500	
+33	10.0	2W	dBm	mV		**-65**	128		**-114**	450	
+32	9.0	1.6W	**-17**	**31.5**		**-66**	115		**-115**	400	
+31	8.0	1.25W	**-18**	**28.5**		**-67**	100		**-116**	355	
+30	7.10	1.0W	**-19**	**25.1**		**-68**	90		**-117**	825	
+29	6.40	800 mW	**-20**	**22.5**	.01 mW	**-69**	80		**-118**	285	
+28	5.80	640 mW	**-21**	**20.0**		**-70**	71	.1nW	**-119**	251	
+27	5.00	500 mW	**-22**	**17.9**		**-71**	65		**-120**	225	.001 pW
+26	4.45	400 mW	**-23**	**15.9**		**-72**	58		**-121**	200	
+25	4.00	320 mW	**-24**	**14.1**		**-73**	50		**-122**	180	
+24	3.55	250 mW	**-25**	**12.8**		**-74**	45		**-123**	160	
+23	3.20	200 mW	**-26**	**11.5**		**-75**	40		**-124**	141	
+22	2.80	160 mW	**-27**	**10.0**		**-76**	35		**-125**	128	
+21	2.52	125 mW	**-28**	**8.9**		**-77**	32		**-126**	117	
+20	2.25	100 mW	**-29**	**8.0**		**-78**	29		**-127**	100	
+19	2.00	80 mW	**-30**	**7.1**	.001mW	**-79**	25		**-128**	90	
+18	1.80	64 mW	**-31**	**6.25**		**-80**	22.5	.01 nW	**-129**	80	.1fW
+17	1.60	50 mW	**-32**	**5.8**		**-81**	20.0		**-130**	71	
+16	1.41	40 mW	**-33**	**5.0**		**-82**	18.0		**-131**	61	
+15	1.25	32 mW	**-34**	**4.5**		**-83**	16.0		**-132**	58	
+14	1.15	25 mW	**-35**	**4.0**		**-84**	11.1		**-133**	50	
+13	1.00	20 mW	**-36**	**3.5**		**-85**	12.9		**-134**	45	
+12	.90	16 mW	**-37**	**3.2**		**-86**	11.5		**-135**	40	
+11	.80	12.5 mW	**-38**	**2.85**		**-87**	10.0		**-136**	35	
+10	.71	10 mW	**-39**	**2.5**		**-88**	9.0		**-137**	33	
+9	.64	8 mW	**-40**	**2.25**	.1 µW	**-89**	8.0		**-138**	29	
+8	.58	6.4 mW	**-41**	**2.0**		**-90**	7.1	.001 nW	**-139**	25	
+7	.500	5 mW	**-42**	**1.8**		**-91**	6.1		**-140**	23	.01fW
+6	.445	4 mW	**-43**	**1.6**		**-92**	5.75				
+5	.400	3.2 mW	**-44**	**1.4**		**-93**	5.0				
+4	.355	2.5 mW	**-45**	**1.25**		**-94**	4.5				
+3	.320	2.0 mW	**-46**	**1.18**		**-95**	4.0				
+2	.280	1.6 mW	**-47**	**1.00**		**-96**	3.51				
+1	.252	1.25 mW	**-48**	**0.90**		**-97**	3.2				