

Manufacturer: Eurotech S.p.A.
Product: REGATE 10-14-35
FCC ID: UKM-RG1014

Name: Oscar Frau
Title: Project Handler
Signature: 

MPE limits (§1.1310)

Mode	Frequency MHz	Duty Cycle %	Antenna		EIRP ¹ dBm	EIRP mW	Distance cm	PD ² mW/cm^2	PD Limit ³ mW/cm^2	Margin dB	2.1091 EIRP Limit mW	2.1091 EIRP Margin dB	PD/PD Limit	Worst PD/PD values to be considered
			Power dBm	Gain dBi										
BT ⁴	2480,0	100	0,8	2,5	3,30	2,1	20	0,0004	1,000	33,71	1260	27,70	0,00043	
BLE ⁵	2440,0	100	-3,3	2,5	-0,80	0,8	20	0,0002	1,000	37,81	1260	31,80	0,00017	0,00876
WiFi 2,4 GHz ⁶	2437,0	100	13,9	2,5	16,44	44,1	20	0,0088	1,000	20,57	1260	14,56	0,00876	
WiFi 5 GHz ⁷	5745,0	100	13,1	4,6	17,70	58,9	20	0,0117	1,000	19,31	1260	13,30	0,01171	0,01171
FDD 71 ⁸	663,0	100	25,0	0,4	25,40	346,7	20	0,0690	0,442	8,07	557	2,06	0,15607	
FDD 12 ⁸	699,0	100	25,0	0,4	25,40	346,7	20	0,0690	0,466	8,30	557	2,06	0,14803	
FDD 13 ⁸	777,0	100	25,0	0,4	25,40	346,7	20	0,0690	0,518	8,76	557	2,06	0,13317	
FDD 14 ⁸	788,0	100	25,0	0,4	25,40	346,7	20	0,0690	0,525	8,82	557	2,06	0,13131	
WCDMA B5 ⁸	826,4	100	25,0	0,4	25,40	346,7	20	0,0690	0,551	9,02	557	2,06	0,12521	
FDD 5 ⁸	824,0	100	25,0	0,4	25,40	346,7	20	0,0690	0,549	9,01	557	2,06	0,12557	0,15607
FDD 4 ⁸	1710,0	100	25,0	2,6	27,60	575,4	20	0,1145	1,000	9,41	1260	3,40	0,11448	
FDD 66 ⁸	1710,0	100	25,0	2,6	27,60	575,4	20	0,1145	1,000	9,41	1260	3,40	0,11448	
WCDMA B4 ⁸	1710,0	100	25,0	2,6	27,60	575,4	20	0,1145	1,000	9,41	1260	3,40	0,11448	
WCDMA B2 ⁸	1850,0	100	25,0	2,6	27,60	575,4	20	0,1145	1,000	9,41	1260	3,40	0,11448	
FDD 2 ⁸	1850,0	100	25,0	2,6	27,60	575,4	20	0,1145	1,000	9,41	1260	3,40	0,11448	

FCC Co-Location = 0,17655 < 1

¹EIRP = (Power dBm + Antenna Gain dBi) + 10 x Log (Duty Cycle % / 100)
²PD = EIRP / (4πx²D²)
³CFR 47 Part 1, §1.1310(e), table 1
⁴See FCC ID: R17WE866C6; Report No: 2323ERM.005A1, p.79
⁵See FCC ID: R17WE866C6; Report No: 2323ERM.005A1, p.21
⁶See FCC ID: R17WE866C6; Report No: 2323ERM.005A1, p.162
⁷See FCC ID: R17WE866C6; Report No: 2840ERM.005A1, p.310
⁸See FCC ID: R17LE910CKNF; RF Exp. (Report No. 57536_LE910C4-NF)
Antenna gains (see the relevant datasheets): type ANT-DB1-RAF-RP5 (BT/BLE/WiFi) and 2JW0124/2JW0124Z (Cellular)

2.1091 EIRP Limit

1.1307 (b)(3)(i)(C) exemption limit

RF Source Frequency MHz	F MHz	R m	λ m	λ/2π m	R/(λ/2π)	Threshold ERP W	Threshold EIRP W	Threshold EIRP mW	EIRP mW	Margin dB
300-1500	663,0	0,20	0,452	0,0720	2,78	0,33946	0,557	557	346,7	2,06
1500-100000	2480,0	0,20	0,121	0,0193	10,4	0,76800	1,260	1260	2,1	27,78
	2440,0	0,20	0,123	0,0196	10,2	0,76800	1,260	1260	0,8	31,97
	2437,0	0,20	0,123	0,0196	10,2	0,76800	1,260	1260	44,1	14,56
	5745,0	0,20	0,052	0,0083	24,1	0,76800	1,260	1260	58,9	13,30
	1710,0	0,20	0,175	0,0279	7,16	0,76800	1,260	1260	575,4	3,40

1.1307 (b)(3)(i)(B) exemption limit

0.3 GHz ≤ f ≤ 1.5 GHz 0.5 cm ≤ d ≤ 20 cm							
f	ERP _{20cm}		d	Pth	Threshold EIRP	EIRP	Margin
GHz	mW	x	cm	mW	mW	mW	dB
1,5	3060	1,796	20	3060	5018		
0.3 GHz ≤ f ≤ 1.5 GHz 20 cm < d ≤ 40 cm							
f	ERP _{20cm}			Pth = ERP _{20cm}			
GHz	mW			mW			
0,663	1352,52			1353	2218	346,7	8,1
1.5 GHz < f ≤ 6.0 GHz 0.5 cm ≤ d ≤ 20 cm							
f	ERP _{20cm}		d	Pth			
GHz	mW	x	cm	mW			
6	3060	2,097	20	3060	5018		
1.5 GHz < f ≤ 6.0 GHz 20 cm < d ≤ 40 cm							
f	ERP _{20cm}			Pth = ERP _{20cm}			
GHz	mW			mW			
2480,0	3060			3060	5018	2,1	33,8
2440,0	3060			3060	5018	0,8	38,0
2437,0	3060			3060	5018	44,1	20,6
5745,0	3060			3060	5018	58,9	19,3
1710,0	3060			3060	5018	575,4	9,4