

Main Radio Constraints for International Certification of Sigfox Devices

Table of Contents

1.	Introduction.....	5
2.	Summary of Radio Standards	6
2.1	ETSI standard	6
2.2	FCC standard.....	8
2.3	Other Standards	10
3.	Annex 1: ETSI additional information.....	15
3.1	Spurious emission of ETSI standard.....	15
3.2	List of countries accepting CE certification for SIGFOX Device	16
4.	Annex 2: Restricted Bands of operation.....	17
4.1	Restricted Bands of FCC standard	17
4.2	Restricted Bands in Mexico	19
4.3	Restricted Bands of Taiwan	20
5.	Annex 3: Reference documents	22
	Table 1: Countries following ETSI standard	8
	Table 2: Countries following FCC standard.....	10
	Table 3: Other standards	14
	Table 4: Radiated emission limits in restricted bands of ETSI standard.....	15
	Table 5: Parameters for TX Spurious Radiations Measurement	15
	Table 6: Restricted Bands of operation of FCC standard.....	17
	Table 7: Radiated emission limits in restricted bands of FCC standard	18
	Table 8: Restricted Band of operation of Mexico standard	19
	Table 9: Radiated emission limits in restricted bands of Mexico standard.....	19
	Table 10: Restricted Bands of operation of Taiwan standard	20
	Table 11: Radiated emission limits in restricted bands of Taiwan standard.....	21



**MAIN CONSTRAINTS FOR INTERNATIONAL
CERTIFICATION OF SIGFOX DEVICES**

Ref.:

Rev.: v1.12

Date: December 2019

CHANGES DESCRIPTION

Version	Description	Author	Date
1.0	Creation	S. Barreiro	19/12/2016
1.1	Israel Addition	S. Barreiro	21/12/2016
1.2	915 – 928 MHz frequency band deleted for NZ	H. Ardiller	11/01/2017
1.3	Singapore table changed	H. Ardiller	27/02/2017
1.4	Most of tables modified; Uruguay, Panama added	S. Barreiro	06/04/2017
1.5	Cleaning	S. Barreiro	20/04/2017
1.6	Update for publication	S. Barreiro	22/05/2017
1.7	Edition corrections	S. Barreiro	22/07/2017
1.8	Updated with Panama, Costa Rica and Uruguay	H. Ardiller	08/08/2017
1.9	Japan: spurious graph modified	S. Barreiro	05/01/2018
1.10	Updated with: Puerto Rico, El Salvador, Ecuador, Iraq, South Korea, Thailand and UAE	H. Ardiller	29/03/2018
1.11	Remove of IRAQ, correction of limits for Singapore and Columbia. Addition of Cambodia, India, Ivory coast, Myanmar and Nigeria. Structure of the document updated.	M. BEAL	16/11/2018
1.12	Addition of Bahrain, Botswana, Chile, Guatemala, Honduras, Indonesia, Kuwait, Saint Lucia, Serbia, Swaziland, Trinidad and Tobago	M. BEAL	16/12/2019



1. Introduction

The aim of this document is to provide guidance on the certification requirements for power, unwanted emissions limits and other constraints to be taken into consideration in the different countries where Sigfox operates or would like to operate in.

This document provides a high-level and simplified summary of the main constraints. This document does not replace standards or regulatory documents.

2. Summary of Radio Standards

The following tables provide a global view of all the operational band, restricted bands and theirs limits. It is a simplified document regarding all the existing Radio Standards. For more detail, please refer to the Radio Standard / Regulatory related to the country.

2.1 ETSI standard

The following table summarizes the countries following the ETSI standard.

Country	Operational Band UL (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
BAHRAIN	865 – 870	16 dBm EIRP	N/A	ETSI EN300 220-1 V3.1.1 Cf Annex 1	EN 300 220-2 v3.2.1	
BOTSWANA	862 – 870	16 dBm EIRP	N/A		NON-SPECIFIC SHORT RANGE DEVICES AND RELATED EQUIPMENT ISSUED BY BOTSWANA COMMUNICATIONS REGULATORY AUTHORITY 11/12/2015	EN 300 220-2 v3.2.1
CE (cf. annex 1)	868 – 868,6	25mW ERP	N/A		EN 300 220-2 v3.2.1	

Country	Operational Band UL (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
IRAN	868 – 868,6	25mW ERP	N/A		Class license, Technical Specification and Operational Condition of Short Range Transmitting Devices (SRDs). Decision CRA-DEC 9000-01, The Second Revision- June 2017	EN 300 220-2 v3.2.1
COTE D'IVOIRE	868 – 868,6	25mW ERP	N/A		Décision n°2017-360 du conseil de régulation de l'autorité de régulation des télécommunications/TIC de Côte d'Ivoire en date du 26 octobre 2017 définissant les conditions d'utilisation de la bande de fréquences radioélectrique 868-870 MHz par les réseaux et services de l'internet des objets	EN 300 220-2 v3.2.1
KENYA	868 – 868,6	25mW ERP	N/A		Guidelines on the use of radio frequency spectrum by short range devices (8 th July 2016) / EN 300 220	EN 300 220-2 v3.2.1
LEBANON	868 – 868,6	25mW ERP	N/A		TRATS013 Requirements for Non-Specific Short Range Devices (SRD) (October 2007) / EN 300 220-1	EN 300 220-2 v3.2.1
MAURITIUS	868 – 868,6	25mW ERP	N/A		EN 300 220-2 v3.2.1	
NIGERIA	868 – 868,6	25mW ERP	N/A		Guidelines on the use of short range devices in Nigeria (2003) / EN 300 220	EN 300 220-2 v3.2.1
OMAN	868 – 868,6	25mW ERP	N/A		Regulation Organizing the Registration and utilization of frequencies and Radio Equipment and their Pricing (2011)	EN 300 220-2 v3.2.1
SERBIA	868 – 868,6	16 dBm EIRP	N/A		EN 300 220-2 v3.2.1	

Country	Operational Band UL (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
SOUTH AFRICA	868 – 868,6	25mW ERP	N/A		ICASA - RFSR2015 / EN 300 220	EN 300 220-2 v3.2.1
SWAZILAND	868 – 868,6	16 dBm EIRP	N/A		Type-Approval-Standards / EN 300 220	EN 300 220-2 v3.2.1
TUNINSIA	868 – 868,6	25mW ERP	N/A		Arrêté du ministre des technologies de la communication et de l'économie numérique du 15 juin 2017, modifiant et complétant l'arrêté du 22 novembre 2011, fixant la puissance maximale et la limite de la portée des équipements radioélectriques de faible puissance et de portée limitée.	EN 300 220-2 v3.2.1
UNITED ARAB EMIRATES	868 – 868,6	25mW ERP	N/A		Ultra-Wide Band and Short Range Devices (18 May 2016) / EN 300 220	EN 300 220-2 v3.2.1

Table 1: Countries following ETSI standard

2.2 FCC standard

The following table summarizes the countries following the FCC standard.



MAIN CONSTRAINTS FOR INTERNATIONAL CERTIFICATION

Ref.:

Rev.: V1.12

Date: December, 2019

Country	Operational Band UL (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
CANADA	902 – 928	4W EIRP	1W	FCC Part 15.247 20 dBc /!\There are restricted bands detailed in FCC Part 15.205 and applicable to SIGFOX devices. Limits for these bands are detailed in FCC Part 15.209 (detailed in annex 2)	RSS-247	FCC Part 15.247
EL SALVADOR	912 – 928	4W EIRP	1W		CUADRO NACIONAL DE ATRIBUCIÓN DE FRECUENCIAS (CNAF) DE LA REPÚBLICA DE EL SALVADOR	FCC Part 15.247
GUATEMALA	902 – 928	27dBm EIRP	N/A		FCC Part 15.247	
HONDURAS	902 – 928	36 dBm EIRP	30 dBm		ESPECTRO ENSANCHADO	FCC Part 15.247
MYANMAR ¹	919 – 924	500mW ERP	N/A		FCC Part 15.247	FCC Part 15.247
PERU	916 – 928	4W EIRP	1W		Resolucion Ministerial 309-2012 MTC 03	FCC Part 15.247
PUERTO RICO	902 – 928	4W EIRP	1W		FCC Part 15.247	
TRINIDAD AND TOBAGO	902 – 928	36 dBm EIRP	N/A		FCC Part 15-247	

¹ For Myanmar, Spurious limit could also follow ETSI EN300 220-1 standard

Country	Operational Band UL (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
UNITED STATE OF AMERICA	902 – 928	4W EIRP	1W		FCC Part 15.247	
URUGUAY	915 – 928	4W EIRP	1W		RESOLUCION Nro.35/2000 DIRECCION NACIONAL DE COMUNICACIONES. Exp.9903040/1/1802	FCC Part 15.247

Table 2: Countries following FCC standard

2.3 Other Standards

Countries which follow their own Standards.

Country	Operational Band UL (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
ARGENTINA	902 – 928	4W EIRP	1W	20 dBc	CNC Resolucion 302/98	FCC Part 15.247
AUSTRALIA	915 – 928	1W EIRP	N/A	20 dBc	AS/NZS 4268:2012	FCC Part 15.247
BRAZIL	902 – 907,5 & 915 – 928	4W EIRP	1W	20 dBc	ANATEL Resolução nº 506	FCC Part 15.247

Country	Operational Band UL (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
CAMBODIA	920 – 925	500mW ERP	N/A	32 dBc or ETSI EN300 220-1 v3.1.1	Technical Regulations for Short Range Radiocommunication Devices / FCC Part 15.247	FCC Part 15.247
CHILE	915 – 928	29 dBm EIRP	N/A	N/A	Resolution Exenta N 1985 de 2017 y sus modificaciones, de la Subsecretaria de Telecomunicaciones. Resolucion Exenta N 3103 de 2012, de la Subsecretaria de Telecomunicaciones.	FCC Part 15.247
COLOMBIA	915 – 928	4W EIRP	1W	@3m 30MHz - 88MHz: -56dBm; 88MHz - 126MHz: -52dBm; 216MHz - 960MHz: -49dBm; > 960MHz: -41dBm	MTIC Resolucion_2544_2009	FCC Part 15.247
COSTA RICA	920.5 – 928	1W EIRP	N/A	N/A	ALCA50_01_07_2015 / FCC Part 15-247	FCC Part 15.247
ECUADOR	915 – 928	33 dBm EIRP	500mW	20 dBc	RESOLTUION-TEL-560-18-CONATEL-2010	FCC Part 15.247
HONG KONG	920 – 925	4W EIRP	1W	10µV outside operating band (-20dBm)	HKTA 1078 issue 1 (December 2017)	
INDIA	865 – 867	4W ERP	1W	ETSI EN300 220-1 v3.1.1	The Gazette of India dated 30/08/2008 (REGD.NO.G.L-33004/99)	EN 300 220-1
INDONESIA	920 – 923	24 dBm EIRP	N/A	-36 dBm (ETSI).	PERDIRJEN SDPPI NO 3 TAHUN 2019 LPWA	

Country	Operational Band (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
JAPAN	920,5 – 923,5	16 dBm EIRP	N/A	≤710MHz: -36 dBm (RBW: 100KHz) 710MHz - 900MHz: -55 dBm (RBW: 1MHz) 900MHz - 915MHz: -55 dBm (RBW: 100KHz) 915MHz - 922.9MHz: -36 dBm (RBW: 100KHz) 922.9MHz - 923.1MHz: -15 dBm (RBW: 1MHz) 923.3MHz - 923.5MHz: -15 dBm (RBW: 1MHz) 923.5MHz - 930MHz: -36 dBm (RBW: 100KHz) 930MHz - 1GHz: -55 dBm (RBW: 100KHz) 1GHz - 1.215GHz: -45 dBm (RBW: 1MHz) > 1.215GHz: -30 dBm (RBW: 1MHz)	ARIB STD-108 version 1.2 (January 2018)	
KOREA, SOUTH	920,8 - 923,4 (20-32)	25mW EIRP	N/A	< 1GHz: -36 dBm (RBW: 100KHz) > 1GHz: -30 dBm (RBW: 1MHz)	Article 30 (RFID / USN of radio equipment); KCC Rules 30 (2016)	
KUWAIT	868 – 868,6	16 dBm EIRP (0,1% or LBT)	N/A	ETSI EN300 220-1 V3.1.1	SRD Ar 2018	EN 300 220-1
MALAYSIA	919 – 923	500mW EIRP	N/A	ETSI EN300 220-1 v3.1.1	CLASS ASSIGNMENT NO. 3 OF 2015	EN 300 220-1

Country	Operational Band (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
MEXICO	902 – 928	4W EIRP	N/A	FCC Part 15.247 with less restricted bands (no restricted band below 37,5Mz nor above 24GHz) Cf. annex 2 for more details	NOM-208-SCT1-2016 (IFT-008-2015)	
NEW ZEALAND	920 – 928	4W EIRP	N/A	800MHz - 915MHz: -49 dBm (RBW: 100KHz) 928MHz - 1GHz: -33 dBm (RBW: 100KHz) outside these bands ~-26 dBm (RBWs defined in Radiocommunication Regulation (radio standard) notice 2015)	General User Radio Licence for Short Range Devices Notice 2016	
PANAMA	902 – 928	4W EIRP	1W	N/A	PNAF 11. BANDAS ESPECIALES DE REGISTRO (November 2015)	FCC Part 15.247
SINGAPORE	920 – 925	500mW ERP	N/A	47MHz - 74MHz: -54 dBm 87.5MHz - 118MHz: -54 dBm 174MHz - 230MHz: -54 dBm 470MHz - 862MHz: -54 dBm 9kHz ≤ other frequencies<1GHz: -36 dBm 1GHz ≤ frequencies < (see ITU-R Rec. SM.329-12 §2.5): -30 dBm	IMDA TS SRD Issue 1 Revision 1, April 2018	
TAIWAN	920 – 925	33 dBm EIRP	500mW	FCC Part 15.247 with different restricted bands; special attention to	Low Power 0002 (LP0002) 10 January 2018 revised	

Country	Operational Band (MHz)	Max Output Power UL	Max Output Power (conducted) UL	Spurious limit (radiated except when mentioned) out of operational bands	Radio standard	Equivalent Radio standard
				825MHz - 915MHz: -49 dBm; 935MHz - 960MHz: -41 dBm 1805MHz - 1850MHz: -41 dBm Cf. Annex 2 for more details		
THAILAND	920 – 925	4W EIRP	N/A	ETSI EN300 220-1 v3.1.1	Book 134, Special Edition 289, Government Gazette // EN 300 220-1	

Table 3: Other standards

3. Annex 1: ETSI additional information

3.1 Spurious emission of ETSI standard

The power of any unwanted emission in the spurious domain shall not exceed the values given in Table 4.

Frequency State	47 MHz to 74 MHz 87,5 MHz to 118 MHz 174 MHz to 230 MHz 470 MHz to 790 MHz	Other frequencies below 1 000 MHz	Frequencies above 1 000 MHz
TX mode	-54 dBm	-36 dBm	-30 dBm
RX and all other modes	-57 dBm	-57 dBm	-47 dBm

Table 4: Radiated emission limits in restricted bands of ETSI standard

In order to measure unwanted emission, a resolution bandwidth (RBW) for a given frequencies is required; see in the table below.

The frequencies of Frequency Range have been defined with the Operating Channel Width (OCW) and the central frequency (f_c) defined in the Sigfox Device ETSI Mode White Paper.

OCW = 192kHz

f_c = 868,13 MHz

Operating Mode	Frequency Range	RBW _{REF}
Transmit mode	$9 \text{ kHz} \leq f < 150 \text{ kHz}$	1 kHz
	$150 \text{ kHz} \leq f < 30 \text{ MHz}$	10 kHz
	$30 \text{ MHz} \leq f < 866.21 \text{ MHz}$	100 kHz
	$866.21 \text{ MHz} \leq f < 867.362 \text{ MHz}$	10 kHz
	$867.362 \text{ MHz} \leq f < 867.65 \text{ MHz}$	1 kHz
	$868.61 \text{ MHz} < f \leq 868.898 \text{ MHz}$	1 kHz
	$868.898 \text{ MHz} < f \leq 870.05 \text{ MHz}$	10 kHz
	$870.05 \text{ MHz} < f \leq 1 \text{ GHz}$	100 kHz
	$1 \text{ GHz} < f \leq 6 \text{ GHz}$	1 MHz
f is the measurement frequency.		

Table 5: Parameters for TX Spurious Radiations Measurement

3.2 List of countries accepting CE certification for SIGFOX Device

ALBANIA	ITALY	SLOVAKIA
ANDORRA	JERSEY	SLOVENIA
AUSTRIA	LATVIA	SPAIN
AZORES	LIECHTENSTEIN	SWEDEN
BELGIUM	LITHUANIA	SWITZERLAND
BOSNIA&HERZEGOVINA	LUXEMBOURG	TURKEY
BULGARIA	MACEDONIA, REPUBLIC OF	UNITED KINGDOM
CANARY ISLAND	MADEIRA	
CROATIA	MALTA	
CYPRUS	MARTINIQUE	
CZECH REPUBLIC	MAYOTTE	
DENMARK	MONACO	
ESTONIA	MOLDAVIA	
FINLAND	MONTENEGRO	
FRANCE	NETHERLANDS	
FRENCH GUYANA	NEW CALEDONIA	
FRENCH POLYNESIA	NORWAY	
GEORGIA	POLAND	
GERMANY	PORTUGAL	
GREECE	REUNION	
GUADELOUPE	ROMANIA	
GUERNSEY	SAINT BARTHELEMY	
HUNGARY	SAINT LUCIA	
ICELAND	SAINT MARTIN (FRANCE)	
IRELAND	SAINT PIERRE AND MIQUELON	
ISLE OF MAN	SAN MARINO	



4. Annex 2: Restricted Bands of operation

4.1 Restricted Bands of FCC standard

Spurious emissions in the frequency bands from the list of table 6 (FCC Part 15.205) shall meet the field strength requirements described in the table 2 (FCC Part 15.209).

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41			

Table 6: Restricted Bands of operation of FCC standard

Spurious emissions shall not exceed the field strength levels specified in the following table.

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

Table 7: Radiated emission limits in restricted bands of FCC standard

4.2 Restricted Bands in Mexico

Spurious emissions in the frequency bands from the list of table 8 shall meet the field strength requirements described in the table 4 (FCC Part 15.209).

MHz	MHz	GHz
37.5–38.25	960–1240	4.5–5.15
73–74.6	1300–1427	5.35–5.46
74.8–75.2	1435–1626.5	7.25–7.75
108–121.94	1645.5–1646.5	8.025–8.5
123–138	1660–1710	9.0–9.2
149.9–150.05	1718.8–1722.2	9.3–9.5
156.52475–156.52525	2200–2300	10.6–12.7
156.7–156.9	2310–2390	13.25–13.4
162.0125–167.17	2483.5–2500	14.47–14.5
167.72–173.2	2690–2900	15.35–16.2
240–285	3260–3267	17.7–21.4
322–335.4	3332–3339	22.01–23.12
399.9–410	3345.8–3358	23.6–24.0
608–614	3600–4400	

Table 8: Restricted Band of operation of Mexico standard

Spurious emissions shall not exceed the field strength levels specified in the following table.

Emisiones no esenciales en la banda (MHz)	Límites de Intensidad de Campo eléctrico y potencia isotrópica radiada equivalente	
	μV/m a 3 m	PIRE
30 – 88	100	3 nW
88 – 216	150	6.8 nW
216 – 960	200	12 nW
Por encima de 960	500	75 nW

Table 9: Radiated emission limits in restricted bands of Mexico standard

4.3 Restricted Bands of Taiwan

Spurious emissions in the frequency bands from the list of table 10 shall meet the field strength requirements described in the table 6.

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)
0.090 - 0.110	162.01 - 167.17	3500.0 - 4400.0
0.490 - 0.510	167.72 - 173.20	4500.0 - 5250.0
2.172 - 2.198	240.00 - 285.00	5350.0 - 5460.0
3.013 - 3.033	322.00 - 335.40	7250.0 - 7750.0
4.115 - 4.198	399.90 - 410.00(Note 1)	8025.0 - 8500.0
5.670 - 5.690	608.00 - 614.00	9000.0 - 9200.0
6.200 - 6.300	825.00 - 915.00	9300.0 - 9500.0
8.230 - 8.400	935.00 - 1240.0	10600 - 12700
12.265 - 12.600	1300.0 - 1427.0	13250 - 13400
13.340 - 13.430	1435.0 - 1626.5	14470 - 14500
14.965 - 15.020	1660.0 - 1755.0	15350 - 16200
16.700 - 16.755	1805.0 - 1850.0	17700 - 21400
19.965 - 20.020	2200.0 - 2300.0	22010 - 23120
25.500 - 25.700	2310.0 - 2390.0	23600 - 24000
37.475 - 38.275	2483.5 - 2500.0	31200 - 31800
73.500 - 75.400	2655.0 - 2900.0	36430 - 36500
108.00 - 138.00	3260.0 - 3267.0	38600 + (Note 2)
149.90 - 150.05	3332.0 - 3339.0	
156.70 - 156.90	3345.8 - 3358.0	

Table 10: Restricted Bands of operation of Taiwan standard

Note 1: 402 MHz - 405 MHz MICS systems (Section 4.11) are excluded.

Note 2: 76 GHz - 77 GHz vehicular radar systems (Section 3.13) are excluded.

Spurious emissions shall not exceed the field strength levels specified in the following table.



Frequency (MHz)	Field strength (micro-volts/meter)	Measurement distance (meters)
0.009 - 0.490 (included)	2,400/Freq.(kHz)	300
0.490 (excluded) - 1.705 (included)	24,000/Freq.(kHz)	30
1.705 (excluded) - 30 (excluded)	30	30
30 (included) - 88 (included)	100	3
88 (excluded) -216 (included)	150	3
216 (excluded) -960 (included)	200	3
above 960 (excluded)	500	3

Table 11: Radiated emission limits in restricted bands of Taiwan standard

5. Annex 3: Reference documents

1. ETSI EN 300200-2 Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 2: Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU for non-specific radio equipment
2. ETSI EN 300200-1 Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 1: Technical characteristics and methods of measurement
3. ETSI EN 301489-3 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz
4. ETSI EN 301489-3 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
5. EN/IEC 60950-1 Information technology equipment – Safety – Part 1: General requirements
6. Australia: AS/NZS 4268 - Australian/New Zealand Standard™ - Radio equipment and systems—Short range devices - Limits and methods of measurement
7. New Zealand: Radiocommunications Regulations (General User Radio Licence for Short Range Devices) Notice
8. New Zealand: Radiocommunications (Radio Standards) Notice
9. USA: FCC – Title 47 Part 15 and in particular Part 15.247
10. Singapore: IMDA TS SRD Issue 1 Revision 1, April 2018
11. Taiwan: Low Power 0002 (LP0002), 10 January 2018 revised
12. Hong Kong: HKTA 1078 Issue 1: Performance Specification for Radio Equipment Operating in the 920 – 925 MHz Band for the Provision of Public Telecommunications Services
13. Peru: Resolucion Ministerial 309-2012 MTC 03
14. Mexico: NOM-208-SCT1-2016 (IFT-008-2015)
15. Argentina: CNC Resolution 302/98
16. Brazil - Resolution No. 506

17. Japan : ARIB STD-T108 version 1.2 (January 2018)
18. Canada: RSS-247
19. Malaysia: CLASS ASSIGNMENT NO. 3 OF 2015
20. Panama: PNAF 11. BANDAS ESPECIALES DE REGISTRO (November 2015)
21. Costa Rica: COSTA RICA ALCA50_01_07_2015
22. Uruguay: RESOLUCION Nro.35/2000 DIRECCION NACIONAL DE COMUNICACIONES.
Exp.9903040/1/1802
23. El Salvador: CUADRO NACIONAL DE ATRIBUCIÓN DE FRECUENCIAS (CNAF) DE LA
REPÚBLICA DE EL SALVADOR
24. Ecuador: RESOLTUION-TEL-560-18-CONATEL-2010
25. Iran: Class license, Technical Specification and Operational Condition of Short Range
Transmitting Devices (SRDs). Decision CRA-DEC 9000-01, The Second Revision- June 2017
26. Puerto Rico: FCC Part 15.247
27. South Korea: Article 30 (RFID / USN of radio equipment); KCC Rules 30 (2016)
28. Thailand: Book 134, Special Edition 289, Government Gazette // EN 300 220-1
29. United Arab Emirates: Ultra-Wide Band and Short-Range Devices (18 May 2016)
30. Colombia: MTIC Resolucion_2544_2009
31. India: The Gazette of India dated 30/08/2008 (REGD.NO.G.L-33004/99)
32. Botswana: NON-SPECIFIC SHORT RANGE DEVICES AND RELATED EQUIPMENT ISSUED BY
BOTSWANA COMMUNICATIONS REGULATORY AUTHORITY 11/12/2015
33. Chile: FIJA NORMA TÉCNICA DE EQUIPOS DE ALCANCE REDUCIDO. Núm. 1.985 exenta
34. Guatemala: DISPOSICIONES TÉCNICAS -RIABAP
35. Honduras: VPARN-REGLAMENTO-DE-LOS-SISTEMAS-WASRLAN-Y-DISPOSITIVOS-DE-
RADIOCOMUNICACION-DE-CORTO-ALCANCE
36. Indonesia: PERDIRJEN SDPPI NO 3 TAHUN 2019 LPWA
37. Kuwait: SRD-Ar 2018
38. Serbia: Pravilnik_RTT_oprema
39. Swaziland: The-Electronic-CommunicationsImportationtype-Approval-and-Distribution-
of-Communications-Equipment-Regulations-2016



40. Trinidad and Tobago: Procedures of Equipment Certification for the Telecommunications and Broadcasting Sectors