

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTToC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-1	Cellular Mobile Handset and Cellular Subscriber Unit / Cellular Mobile Transmitter	1	No	703 – 803	34.77	0	200KD9W 200KG7D 1M25D9W 247KGXW 246KG7W 248KGXW 247KG7W 4M15F9W 4M05G7D 4M48W7D 2M70G7D 2M69W7D 1M08G7D 1M09W7D	For every 1 dB increase in maximum antenna gain above 0 dB, there shall be a 1 dB decrease in maximum transmitter output RF power. The equivalent isotropic radiated power (EIRP) shall not exceed 33 dBm.
				824 – 894	38.45			
				1850 – 1990	33			
	Push-To-Talk over Cellular (PTToC)	1	Yes	1710 - 1755 2110 - 2155	30			
CL-2	Low-Powered FM Transmitter	1	No	88.3, 88.5 and 88.7 (Center Freq. of Operation)	-49.208	0	54K4F3E	FCC Part 15.329
CL-3	Family Radio Service (FRS) / General Mobile Radio Service (GMRS)	1	Yes	462.525 - 462.750, 467.525 - 467.750	33	0	16K0F3E 11K0F3E 5K26F3E	N/A

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-4	Broadband Wireless Access / Wireless Fidelity (Wi-Fi) / Bluetooth	1	No	2400 - 2483.5	30	6	22M0D7W 3M50D7W 912KF1D 914KF1D 1M16G1D 1M15G1D 2M41GXW 2M32GXW 2M22F1D 719KF1D 1M03F1D 1M00F1D 1M40G1D 684KF1D 1M25F1D 924KF1D 1M23G1D 1M26G1D 9M09D1D 16M3G1D 17M6G1D 36M4G1D 22M0GXD 20M0GXD 1M10F1D 9M05G7W 9M06D7W	See Schedule B.1

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-5	Broadband Wireless Access / Wireless Fidelity (Wi-Fi)	2 (Private indoor use)	No	2400 - 2483.5	30	6	22M0D7W 3M50D7W	See Schedule B.1
CL-6	Broadband Wireless Access / Wireless Fidelity (Wi-Fi)	2 (Public indoor and outdoor use)	Yes	902 - 928	30	6	4M44D7D 8M79D7D 17M7D7D	See Schedule B.4
				2400 - 2483.5	30	6	22M0D7W 3M50D7W	See Schedule B.1
CL-7	Broadband Wireless Access / Wireless Fidelity (Wi-Fi)	3	Yes	2400 - 2483.5	30	6	22M0D7W 3M50D7W	See Schedule B.1
CL-8	Broadband Wireless Access / Wireless Fidelity (Wi-Fi) / HiperLAN / Worldwide Interoperability for Microwave Access (WiMAX)	1	No	5150 - 5250 5250 - 5350	24	6	10M0D7W 37M0D7W	See Schedule B.2
				5470 - 5725 5725 - 5850	24 30	6 6	22M0D7W 3M50D7W 20M0G1D 40M0G1D 80M0G1D 20M0GXD 40M0GXD 80M0GXD 22M0GXD	

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTcC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-9	Broadband Wireless Access / Wireless Fidelity (Wi-Fi) / HiperLAN / Worldwide Interoperability for Microwave Access (WiMAX)	2 (Private indoor use)	No	5150 - 5250 5470 - 5725 5725 - 5850	30 24 30	6 6 6	10M0D7W 22M0D7W 3M50D7W	See Schedule B.2
CL-10	Broadband Wireless Access / Wireless Fidelity (Wi-Fi) / HiperLAN / HiperMAN / Worldwide Interoperability for Microwave Access (WiMAX)	2 (Public indoor and outdoor use)	Yes	5150 - 5250 5470 - 5725 5725 - 5850	30 24 30	6 6 6	10M0D7W 22M0D7W 3M50D7W 4M21D7W 8M26D7W 16M4D7W	See Schedule B.2
CL-11	Broadband Wireless Access / Wireless Fidelity (WiFi) / HiperLAN / HiperMAN / Worldwide Interoperability for Microwave Access (WiMAX)	3	Yes	5151 – 5250 5470 – 5725 5725 – 5850	23 30	4 6	10M0D7W 22M0D7W 3M50D7W	See Schedule B.2
CL-12	SCADA Transceiver (Automatic Meter Reader)	1	No	424.775	10	2	16K0F3D	N/A

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-13	Vehicle Telematics System / Remote Keyless Entry	1	No	902 – 928	21	0	200KL1D	Any increase in gain of 1dB there shall be an equal decrease of transmit RF output power of 1dB.
				285.5, 287, 303.5, 307.5-321, 337, 338, 398, 411-412, 433.05-434.79, 439-440	10	0	16K0F3D 75K0F1D 106KF1D 213KK1D 190KF1D 160KF1D 54K1F1D 55K0L1D	N/A
				433.05 – 434.79	10	0	54K1F1D	N/A
				0.125	-28.96	0	2K50K1D 2K50A1D 14K5L1D 25K1L1D 12K0A1D 125KA1D	N/A
				315	-47.38	0	160KF1D	N/A
				0.021845	-26.15	0	12K0A1D	N/A
CL-14	Personal Satellite Tracker	1	No	1611.25 - 1618.75	20	0	2M31G1D	N/A

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-15	RFID Reader	1	No	903.14 - 927.26	30	3	500KD7D	N/A
		1	No	13.110-14.010	See other Specific Technical Operating Parameters	0	14K0A1D 398KG1D	The field strength of any emissions in accordance with FCC Part 15C 15.225)
				902-928	30	6	200KK1D	N/A
				0.1342	-43.24	0	9K63A1D	N/A
CL-16	Automatic Meter Reader Repeater Unit	3	Yes	0.058	-35.2	0	8K00P0N	N/A
				433.225, 433.725	14	-5.6	232KF1D	
				902 - 928	28	5.15	200KL1D	N/A
CL-17	Remote Control Transmitter	1	No	315	-45	0	143KK1D	N/A
				431.5, 432.4, 432.7, 433.0, 433.3, 433.6, 433.9, 434.2, 434.8, 435.1, 435.4, 435.7, 436.0, 436.3, 436.6	0	0	483KF1D 28K3A1D	N/A

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-18	Automobile Distance Sensor/ Field Disturbance Sensor (including ShortRanged Vehicle Radar Systems)	1	No	22,000 - 29,000	-41.9	0	865MD7D	Ultra-wide band radar radiocommunications device.
				23,570 - 25,258	-24	12	1G60P0N 1G68P0N	N/A
				57,000 - 71,000	-10	20	260KP0N 5G97P0N 5G54P0N 5G67P0N 5G62P0N	FCC Part 15.255 (c)(3)
				76,551 - 76,844	See other Specific Technical Operating Parameters	See other Specific Technical Operating Parameters	290MN0N	The power density of any emission within the band shall not exceed 30 $\mu\text{W}/\text{cm}^2$ at 3 meters from the exterior surface.
				76,000 - 77,000	24.61	-2.89	200MF1N 400MF1N 800MF1N	

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-19	Medical Telemetry	1	No	0.175	30	0	18K0M1D 74K4F1D	N/A
				402.0 - 405.0	-16.02	0	54K0F1D	N/A
				402.15 - 404.85	-10.6	0.8	141KF1D	N/A
CL-20	Point-to-Point Radiocommunication System	3	Yes	902 - 928	30	6	2K00F1D 4M44D7D 8M79D7D 17M7D7D	See Schedule B.4
				3	Yes	2400 - 2483.5	30	6
		5470 - 5725	See other Specific Technical Operating Parameters			The EIRP shall be limited to the electromagnetic ionizing radiation emission limit of +55dBW.		
		5725 - 5850		See other Specific Technical Operating Parameters	0	14K0A1D	The field strength of any emissions within the band 13.553 - 13.567 MHz shall not exceed 15,848 μ V/m at 30 meters. (FCC Part 15F)	
		13.553 - 13.567	See other Specific Technical Operating Parameters				0	33
		24,100.0 - 24,200.0						

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-20	Point-to-Point Radiocommunication System	3	Yes	57,000 – 66,000	27	38	899GP1D 2G10W7D	N/A
CL-21	Satellite Telemetry	1	No	148.0, 150.5	38	2	5K00G1D	Earth-to-Space
				137.2000, 137.2250, 137.2500, 137.2875, 137.3125, 137.4350, 137.4600, 137.6625, 137.6875, 137.7125, 137.7375, 137.8000	38	2	19K00G1D	Space-to-Earth
				401.678	26.671	2	2K00G1D	Earth-to-Space
				401.62 – 401.68	27	2.16	40K0G7D 2K00G1D	Earth-to-Space
CL-22	Wireless Microphone	1	No	64.5, 64.7, 64.9, 65.1, 65.3, 65.5, 65.7, 65.9	16.9	0	60K0F3E	FCC Part 74
				470.125 – 514 514-558 558 – 602	17	0	60K0F3E	FCC Part 74
CL-23	Satellite Phone	1	No	1616.0 – 1660.5 1668-1675	35.2	3	41K7Q7W	Q639555A

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-24	Onsite Paging System Transmitter	1	No	467.750	9.73	0	8K60G1D	N/A
CL-25	Unmanned Aerial Systems / Transceiver Modules onboard Unmanned Aerial Systems	1	No (under 250g)	902 - 928	33	3	29KD7W	For every 1 dB increase in maximum antenna gain above 3 dB, there shall be a 1 dB decrease in maximum transmitter output RF power. The equivalent isotropic radiated power (EIRP) shall not exceed 36 dBm.
			Yes (250g or over)	2400 - 2483.5	30	6	3M50D7W 22M0D7W	See Schedule B.1
				5725 - 5850	30	6	3M50D7W 80M0D7W	See Schedule B.2
				5150 - 5250	24	6	37M0D7W	See Schedule B.2
CL-26	Wireless Fidelity (WiFi) Module	1	No	57,240 – 63,720	16.7	15.3	3G06D7W	
CL-27	Compact Surveillance Radar	3	Yes	10,308 – 10,378	20.96	14	70M1F3N	

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-28	Fixed White Space Radiocommunications Device	Type 2 and Type 3	Yes	626 – 632	10	6	6M00G1D	See Schedule B.3 Approved geolocation database administrators (GLDA): 1. Any Connect Limited
				680 – 686				
				548 – 554 554 – 560 566 – 572 620 – 626 686 – 692	14			
				572 – 578 578 – 584 584 – 590 590 – 596 596 – 602 602 – 608 608 – 614 614 – 620 692 – 698	30			
CL-29	Pressure Monitoring Sensor	Type 1	No	315	-45	0	143KK1D	N/A
				433.92 – 433.92	1.38	-23.8	106KF1D 213KA1D	N/A
CL-30	Transceiver Module /Device	Type 1	No	902 – 928	20	6	384KF7D 83K3F3E	N/A
			No	0.21845	-50	0	3K16G1D	N/A

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-31	Wireless Charging System	Type 1	No	0.111	-82	0	120KL1D	N/A
				0.110 – .1378	-33	0	3K20D1D 2K50K1D 2K50A1D 14K5L1D 25K1L1D 3K20D1D 780HFID	N/A
				0.125	-28.96	0	2K50K1D 2K50A1D 14K5L1D 25K1L1D 5K52A1D	N/A
				0.1145	-82	0	120KL1D	N/A
				0.3265	-19.1	0	14K6F1D 165K5F1D	N/A
CL-32	Citizen Band Radiocommunication Device	Type 1	Yes	26.965-27.405	36	0	8K00A3E	See Schedule B.5
		Type 3	Yes		40.79	0	4K00J3E 4K00R3E 4K00H3E	See Schedule B. 5

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-33	Handheld Ultra- Wideband Systems	1	No	3100-10,600	-	-	680MF1D 690MF1D 641MF1D 513MG1D 511MG7D 624MG1D	See Schedule B.6
CL-34	Digital Enhanced Cordless Telecommunications	1	No	1920-1930	16.43	2	1M47F1D 1M37F1D	FCC Part 15D 15.323
CL-35	Lower-power wide area network/LoRaWAN	1	No	902-928	30	6	606KF1D	For any increase in gain of 1dB above the maximum, there shall be an equal decrease of the transmitter output power of 1dB.
CL-36	Multi-Use Radio Service (MURS)	1	Yes	154.6	33	0	11K0F3E 16K0F3E	N/A
CL-37	Wildlife Tracking Telemetry	1	No	216 – 220	10	2	100HP0N	FCC Part 90 Subpart J 90.248
CL-38	Data Communications Transmission Module	1	No	57000-71000	See other Specific Technical Operating Parameters		481MA1D	The peak power of any emission shall not exceed 43 dBm (FCC Part 15 15.255I(1)(i))

Telecommunications Authority of Trinidad and Tobago
Schedule B - Schedule of Devices Eligible for Use under a Class Licence

Class Licence Category Type:

Type 1 - End-user devices or customer premise equipment (Registration required using Form N1 for FRS, FRS/GMRS, MURS, UAS >250g., CB Radios and PTTtoC)

Type 2 - Base Stations (Registration required using Form R-CL for public indoor and outdoor base stations)

Type 3 - Fixed Stations (Registration required using Form R-CL)

CL Code	Type of Radiocommunication Device	Class Licence Category Type	Registration Required (Yes/No)	Frequency Range of Operation (MHz)	Max. Transmitter Output Power (dBm)	Max. Antenna Gain (dB)	ITU Class of Emission	Other Specific Technical Operating Parameters
CL-39	Wireless Local Area Network (WLAN)/Wireless Fidelity (Wi-Fi)	1	No	5925-6425	24	0	D7W	For every 1 dB increase in maximum antenna gain above 0 dB, there shall be a 1 dB decrease in maximum transmitter output RF power.
CL-40	Wireless Local Area Network (WLAN)/Wireless Fidelity (Wi-Fi)	2 (Private indoor)	No	5925-6425	30	0	D7W	For every 1 dB increase in maximum antenna gain above 0 dB, there shall be a 1 dB decrease in maximum transmitter output RF power.
CL-41	Cellular Repeaters	3	Yes	824-894 1850-1990 1710-1755/2110 – 2155	10	65	F9W G7D D7W GXW	Owners and/or importers of consumer cellular repeaters and owners and/or importers of business or industry-type cellular repeaters shall be guided by the process identified here Approach-for-Authorisation-of-CellularRepeaters-November-2023.pdf (tatt.org.tt)
CL-42	Satellite Tracking and Monitoring Systems	1	Yes	1616-1626.5	38.2	3	41K7Q7W	This device shall use only data functions with voice use prohibited.

Telecommunications Authority of Trinidad and Tobago
Schedule B.1 - Other Specific Technical Operating Parameters

Parameter	Requirement/Maximum Value	Comments
Maximum Effective Radiated Power ERP (from RF transmitter)		For frequency hopping systems employing less than 75 hopping channels RF output power shall be no greater than 20.97 dBm. For systems using digital modulation and frequency hopping systems employing at least 75 non-overlapping hopping channels RF output power shall be no greater than 30 dBm.
Antenna Gain		For every dB gain above 6 dBi, ERP of RF transmitter shall be reduced by 1 dBm.
Modulation scheme	Digital	Any digital modulation technique e.g., BPSK, QPSK.
Multiple Access technique	Frequency Hopping Spread Spectrum (FHSS) Direct Sequence Spread Spectrum (DSSS)	Any other multiple access technology that can co-exist with FHSS and DSSS systems can be employed.
Minimum Channel Bandwidth	FHSS (20dB) – 25kHz DSSS (6dB) – 500kHz	FHSS shall use at least 15 well- defined, non-overlapping channels separated by the channel bandwidth. The dwell time per channel shall not exceed 0.4s within a period of 0.4n, where n is the number of channels employed.
Frequency Range	2.4 – 2.4835GHz	This frequency range can be used for either indoor or outdoor operation.
Narrowband Transmitter spurious emission limits	Operating 30MHz – 1GHz = -36dBm 1GHz to 12.75GHz = -30dBm Standby 30MHz – 1GHz = -57dBm 1GHz to 12.75GHz = -47dBm	
Narrowband Receiver spurious emission limits	30MHz – 1GHz = -57dBm 1GHz to 12.75GHz = -47dBm	
Wideband Transmitter spurious emission limits	Operating 30MHz – 1GHz = -86dBm/Hz 1GHz to 12.75GHz = - 80dBm/Hz Standby 30MHz – 1GHz = -107dBm/Hz 1GHz to 12.75GHz = - 97dBm/Hz	
Maximum Spectral Power density	FHSS – 100mW/100kHz DSSS – 10mW/1MHz	
Standardization	FCC	

Telecommunications Authority of Trinidad and Tobago
Schedule B.2 – Other Specific Technical Operating Parameters

Parameter	Requirement/Maximum Value	Comments
Maximum Effective Radiated Power ERP (from RF transmitter)	5.15-5.25 GHz:- Outdoor access point – 30 dBm Indoor access point – 30 dBm Client devices ¹ – 24 dBm 5.25-5.35 GHz and 5.47-5.725 GHz – 24 dBm 5.725-5850 GHz – 30 dBm	
Antenna Gain	6 dBi	For every dB gain above 6 dBi, ERP of RF transmitter shall be reduced by 1 dBm.
Modulation scheme	Digital	Any digital modulation technique e.g., BPSK, QPSK.
Multiple Access technique (WiFi and WiMAX Technology)	Frequency Hopping Spread Spectrum (FHSS) Direct Sequence Spread Spectrum (DSSS) Orthogonal Frequency Division Multiplexing (OFDM)	Any other multiple access technology that can co-exist with FHSS, DSSS and OFDM systems can be employed.
Minimum Channel Bandwidth (WiFi and WiMAX Technology)	FHSS (20dB) – 25kHz DSSS (6dB) – 500kHz OFDM (20dB) – 1.25MHz	FHSS shall use at least 75 well-defined, non-overlapping channels separated by channel bandwidth. The dwell time per channel shall not exceed 0.4s within a period of 30s.
Operating Frequency Range (WiFi and WiMAX Technology)	5150 – 5250MHz 5250 – 5350MHz 5470 – 5725MHz 5725 – 5850MHz	Frequency ranges 5150 – 5250 MHz, 5250 – 5350 MHz, 5470 – 5725 MHz and 5725 – 5850 MHz can be used for either indoor or outdoor operation.
Narrowband Transmitter mask (WiFi technology)	Un-modulated $F_{tx} \pm 3$ to 14MHz = -49dBm Modulated $F_{tx} \pm 3$ to 8MHz = -32dBm $F_{tx} \pm 2$ to 14MHz = -35dBm	

Parameter	Requirement/Maximum Value	Comments
Transmitter Spectral Mask (WiMAX technology)	<p>20 MHz Channelization: F_{tx} $\pm 9.5\text{MHz} = 0\text{dBm}$ $F_{tx} \pm 10.9\text{MHz} = -25\text{dBm}$ $F_{tx} \pm 19.5\text{MHz} = -32\text{dBm}$ $F_{tx} \pm 29.5\text{MHz} = -50\text{dBm}$</p> <p>10 MHz Channelization: $F_{tx} \pm 4.75\text{MHz} = 0\text{dBm}$ $F_{tx} \pm 5.45\text{MHz} = -25\text{dBm}$ $F_{tx} \pm 9.75\text{MHz} = -32\text{dBm}$ $F_{tx} \pm 14.75\text{MHz} = -50\text{dBm}$</p>	
Transmitter spurious emission limits (WiFi Technology)	<p>Operating $25\text{MHz} - 1\text{GHz} = -69\text{dBm}$ $1\text{GHz} \text{ to } 40\text{GHz} = -63\text{dBm}$</p> <p>Standby $25\text{MHz} - 1\text{GHz} = -90\text{dBm}$ $1\text{GHz} \text{ to } 40\text{GHz} = -80\text{dBm}$</p>	
Receiver spurious emission limits (WiFi Technology)	$25\text{MHz} - 1\text{GHz} = -90\text{dBm}$ $1\text{GHz} \text{ to } 40\text{GHz} = -80\text{dBm}$	
Maximum Spectral Power density (WiFi Technology)	<p>FHSS – $1\text{W}/100\text{kHz}$ DSSS – $10\text{mW}/3\text{kHz}$</p>	
Standardization	FCC, ETSI	

¹ A device with transmissions generally under the control of an access point and is not capable of initiating a network.

Telecommunications Authority of Trinidad and Tobago
Schedule B.3 - Other Specific Technical Operating Parameters

Parameter	Requirement/Maximum Value	Comments
Antenna Gain	6 dBi	For every dBi gain above the maximum value, the maximum conducted output power shall be reduced by 1 dB.
Out-of-band Emission Limit (100 kHz)	-58.8 dBm	The out-of-band emission limit applies to the 100 kHz immediately adjacent to the channel used by the WSD and every subsequent 100 kHz block of spectrum.
Modulation scheme	Digital	Any digital modulation technique e.g., QPSK, 64QAM
Multiple Access technique	Direct Sequence Spread Spectrum (DSSS) Orthogonal Frequency Division Multiplexing (OFDM)	Any other multiple access technology that can co-exist with DSSS and OFDM systems can be employed.
Device Transmit Configuration	Serial number Antenna height above ground Location and location uncertainty. Channels used Maximum expected transmit power	Device and usage parameters (at a minimum) are to be to a geolocation database during a query for operational parameters.
Device Receive Configuration	Available channels Maximum permitted power Channel validity Period	Operational parameters received from the geolocation database during a query.
Channel Validity Period	6 Months	Devices are required to cease transmission on expiry of the channel validity and query a geolocation database for new operational parameters.
Polling Period	24 hours	Devices are required to poll a geolocation database once every 24 hours to verify that their operational parameters continue to be valid, and make adjustments as indicated by the geolocation database.
Standardization	FCC ETSI	
White Space Access Mechanism	Geolocation database	Approved geolocation database administrators (GLDA): Any Connect Limited

Telecommunications Authority of Trinidad and Tobago

Schedule B.4 - Other Specific Technical Operating Parameters

Parameter	Requirement/Maximum Value	Comments
Maximum Effective Radiated Power ERP (from RF antenna)	36dBm	
Maximum Transmitter RF Output Power	30 dBm	For frequency hopping systems operating in the 902-928 MHz band: 1 watt for systems employing at least 50 hopping channels; and 0.25 watts for systems employing less than 50 hopping channels, but at least 25 hopping channels.
Antenna Gain	6dBi	For every dB gain above 6 dBi, ERP of RF transmitter shall be reduced by 1 dBm.
Modulation scheme	Digital	Any digital modulation technique e.g., BPSK, QPSK
Multiple Access technique	Frequency Hopping Spread Spectrum (FHSS) Direct Sequence Spread Spectrum (DSSS)	Any other multiple access technology that can co-exist with FHSS and DSSS systems can be employed.
Maximum Channel Bandwidth	500 kHz (20dB channel bandwidth)	For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.
Frequency Range	902 – 928 MHz	This frequency range can be used for either indoor or outdoor operation.
Out-of-band Emission Limits		For every 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.
Standardization	FCC	FCC Part 15.247

Telecommunications Authority of Trinidad and Tobago
Schedule B.5 – Other Specific Technical Operating Parameters

Parameter	Requirement/Maximum Value (AM)	Requirement/ Maximum Value (SSB)
Max. Transmitter Output Power (dBm)	36	40.79
Antenna Gain	For every 1 dB antenna gain above 0dB, the output power must be reduced by the 1 dB.	For every 1 dB antenna gain above 0dB, the output power must be reduced by the 1 dB.
Unwanted Emissions Limits	<ul style="list-style-type: none"> • 25 dB attenuation 4-8 kHz from center frequency. • 35 dB attenuation 8-20 kHz from center frequency. • 53 + 10 log (P) dB in any frequency band removed by greater than 250% of the authorised bandwidth. Where P is the transmitter output power in Watts. • 60dB in any frequency band centered on a harmonic of the carrier frequency. 	<ul style="list-style-type: none"> • 25 dB attenuation 2-6 kHz from center frequency. • 35 dB attenuation 6-10 kHz from center frequency. • 53 + 10 log (P) dB in any frequency band removed by greater than 250% of the authorised bandwidth. • 60 dB in any frequency band centered on a harmonic of the carrier frequency.

The Authority shall:

1. require registration of all fixed stations as stipulated in section 3.4 of the Authority's Class Licensing Regime.
2. permit Citizen Band (CB) radiocommunications devices to be used for personal or non-commercial communication.
3. allow the use of only fixed, mobile and portable CB radiocommunications devices certified by the Authority, in accordance with the Equipment Standardization Framework.
4. prohibit the modification of all CB radiocommunications devices.
5. allow the frequencies allocated to CB radiocommunications devices to be shared amongst all users.
6. prohibit the use of any external amplifier for boosting the output power above 4 Watts.

7. limit the maximum ERP of CB devices to operate on AM (A3) – 4 Watts (carrier power) SSB – 12 Watts (peak envelope power).
8. prohibit CB operators from integrating their CB radiocommunications devices to the Public Switched Telephone Network or rebroadcasting any transmission over this medium.
9. restrict CB radiocommunications devices to voice communication only.
10. allow CB radio fixed antenna systems to be erected 5 meters higher than the highest point of the building or tree on which it is mounted. However, the highest point of the antenna must be no more than 18 meters above the ground. Fixed antennas shall comply with Town and Country Planning regulations. Fixed antennas located near airports shall also comply with the Civil Aviation Authority's restrictions.
11. not certify the use of fixed, mobile or portable CB radiocommunications devices which do not conform to the Authorisation Framework guidelines.
12. not assign call signs or CB handles (code names) to individuals.
13. not allow the use of call signs issued by the Authority, for example, amateur or maritime radio, on the CB radiocommunications device channels while communicating.
14. not permit the use of CB radiocommunications devices for public correspondence.
15. not permit the use of CB radiocommunications devices for obscene, derogatory or inappropriate transmissions.
16. mandate that CB operators refrain from causing harmful interference to other CB radiocommunications devices or any other broadcast receiver (e.g., television and AM/FM receivers).
17. not protect, nor shall the users of CB radiocommunications devices claim protection from harmful interference caused by similar or other radiocommunications devices.
18. require all operators of CB radiocommunications devices to give priority access to ODPM, regional corporations, CB radio operators directly involved in emergency relief operations and first responders to the following five channels (3,5,7,9,11), in the event of local or national emergencies to assist in emergency communications.

Telecommunications Authority of Trinidad and Tobago
Schedule B.6 – Other Specific Technical Operating Parameters

Parameter	Requirement/Maximum Value	Comment
Occupied Bandwidth	-	Must be contained between 3100 MHz -10600 MHz
EIRP	0 dBm	The limit on EIRP is based on 50MHz bandwidth centered on the frequency at which the highest radiated emission occurs, F_M .
Radiated Spurious Emissions	960-1610 MHz = -75 dBm 1610-1990 MHz = -63.3 dBm 1990-3100 MHz = -61.3 dBm 3100-10600 MHz = -41.3 dBm Above 10600 MHz = -61.3 dBm 1164-1240 MHz = -85.3 dBm 1559-1610 MHz = -85.3 dBm	
Standardization	FCC	CFR 47 Part 15 Subpart F 15.519