

Global 2.4 and 5GHz Unlicensed Spectrum Availability

Country	C. Code	2400-2483.5 MHz (Ch 1-13)	5150-5250MHz (Ch 36-48)	5250-5350MHz (Ch 52-64)	5470-5725MHz (Ch 100-140)	5725MHz Boundary (Ch 144) [Note v]	5725-5825MHz (Ch 149-161)	5825-5850MHz (Ch 165)	5850-5875MHz (Chan 169)	Additional Information	TPC	DFS Type (recommendations in Italics)	BW Rest.	Detail Report Available
Albania	AL	100mW EIRP	200mW EIRP	200mW EIRP	1000mW EIRP		25mW EIRP	25mW EIRP	25mW EIRP		EU [TPC Note 1]	EU	N	Y
Algeria	DZ	100mW EIRP (Indoor only at this power level)	200mW EIRP	200mW EIRP	200mW EIRP (5470-5670MHz only)					Outdoor power limits: 2.4G: 28mW EIRP 5250-5350: 1W EIRP 5470-5670: 1W EIRP		EU	N	Y
American Samoa	AS	1000mW Cond.+6dBi [Note 1]	250mW Cond.+6dBi (mobile)	250mW Cond.+6dBi	250mW Cond.+6dBi	250mW Cond.+6dBi	1000mW Cond.+6dBi	1000mW Cond.+6dBi	See 6GHz table	Outdoor AP: 5150-5250MHz 1W cond. + 6dBi + elevation mask Indoor AP: 5150-5250MHz 1W cond. + 6dBi		FCC	N	Y
Australia	AU	4000mW EIRP	200mW EIRP	200mW EIRP	1000mW EIRP (5600-5650MHz not allowed)	1000mW EIRP	4000mW EIRP	4000mW EIRP			AU	EU	N	Y
Austria	AT	100mW EIRP	200mW EIRP	200mW EIRP	1000mW EIRP		25mW EIRP	25mW EIRP	25mW EIRP		EU	EU	N	Y
Austria	AT		40mW EIRP [On board trains and within road vehicles]	Not permitted in road vehicles, trains and aircraft.	Not permitted in road vehicles, trains and aircraft. Use for UAS not permitted.					Draft Implementing Decision [EU/828]				

Table Key

100mW EIRP	Indoor and outdoor use permitted, with power level. Check notes for outdoor power level differences.
200mW EIRP	Indoor use only
200mW EIRP	Indoor and outdoor use, with power level restrictions, such as TPC
200mW EIRP	Indoor use, with power level restrictions, such as TPC
200mW EIRP	White text - DFS required.
200mW E.I.R.P (5470-5670MHz)	Band restriction (example, upper part of band not available)
100mW EIRP	Recommended power level (italics)
	Not available for unlicensed use
	Planned rules for operation or current consultation. This shading will be removed when rules are confirmed or implemented.

Country Specific Notes

Important Notes

- i **This document is provided as a guidance only and believed to be correct at the time of publication. As rules for each individual country may be complex this table is unable to summarize every possible product configuration and is intended primarily for mobile unlicensed use. Fixed, point-to-point, automotive and licensed systems may be covered by different regulations, and a more detailed analysis of country specific regulations is recommended in these situations.**
- ii **Dynamic Frequency Selection (DFS) is sometimes specified as a requirement but without the detail contained in FCC, EU or other regulations (particularly with regard to the types of signals that must be detected). In these cases a recommendation for DFS type is made in italics. Countries that refer to ITU Resolutions will normally have EU as the recommended type.**
- iii **Some instances of DFS requirements refer to the uniform spreading function only (and make no mention of radar detection). This is noted in Additional Information, where known.**
- iv **Channel numbers are given for convenience only, not all spectrum regulations are written with respect to WLAN channels or technology type.**
- v **Operation across 5725MHz boundary or straddle channels such as Channel 144 require operation is two bands simultaneously and are generally restricted by the requirements of both bands (including spurious emissions). Summary table presents the most strict requirement below or above 5725MHz. Certain jurisdictions may have specific guidance and requirements for this, for example see FCC KDB 789033, section III.**

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Transmitter Power Control (TPC) Requirements

EU	<i>EU based requirements for TPC requires a RLAN device to have a TPC range of 6dB. Full details of limits and range can be found in EN 301 893 V2.1.1 sections 4.2.3.2.2 and 4.2.3.2.3.</i>
FCC	<i>FCC requirements for TPC are contained in 47CFR Part 15.407(h)(1). A device is required to be capable of operating at least 6dB below the EIRP limit (unless operation is always less than 500mW EIRP).</i>
ITU	<i>TPC requirements based upon ITU Resolution 229, paragraph 7. Average mitigation factor of 3dB (implies a range of 6dB in power level); or limit is 3dB lower than limit specified in the table.</i>
AU	<p><i>TPC required for the following bands:</i></p> <ul style="list-style-type: none"> - 5250-5350MHz (if transmitter power > 100mW EIRP) - 5470-5600MHz & 5650-5725MHz (if transmitter power > 500mW EIRP) <p><i>Assuming ITU like characteristics that provide a 3dB mitigation factor (at least 6dB power range); or power limited to 3dB below the value specified in the table.</i></p>
TPC Note 1	<i>EU requirements are recommended based upon reference or inference of ETSI standards for this country, see EU requirements above.</i>

Sample

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Version	Country	Code	Notes
2.5.0	Example only	-	Example only

Sample

Global 6GHz Unlicensed Spectrum Availability

Country	C. Code	Equipment Type	5875-5895MHz	5895-5925MHz	Additional Information	Equipment Type	5925-6425MHz	6425-6525MHz	6525-6875MHz	6875-7125MHz	Additional Information	BW Rest.	Detail Report Available
Albania	AL												
Algeria	DZ												
American Samoa	AS	 See United States	See United States		Same equipment categories in US entry apply.	See United States	See United States	See United States	See United States	See United States	Same equipment categories in US entry apply.	See US	
Australia	AU					Low Power Indoor (LPI) Very Low Power (VLP)	250mW EIRP [12.5mW/MHz] 25mW EIRP [1.25mW/MHz]						
Austria	AT					Low Power Indoor (LPI) [Commission Implementing Decision 2021/1067 expects administrations to make band available by 01 December 2021] Very Low Power (VLP)	23dBm EIRP 10dBm/MHz 14dBm EIRP 1dBm/MHz				5945-6425MHz available. Restricted to indoor use, including trains with metal coated windows and aircraft. Outdoor use including in road vehicles is not permitted. Access points must have an integrated antenna and not be battery powered. 5945-6425MHz available. Use on drones is prohibited.		

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