



# **Radiocommunications (Low Interference Potential Devices) Class Licence 2000**

**as amended**

made under sections 132 and 135 of the

*Radiocommunications Act 1992*

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This compilation was prepared on 14 July 2014  
taking into account amendments up to *Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2014 (No. 1)*

Prepared by the Australian Communications and Media Authority

**1 Name of Class Licence** [see Note 1]

This Class Licence is the *Radiocommunications (Low Interference Potential Devices) Class Licence 2000*.

**2 Commencement** [see Note 1]

This Class Licence commences on gazettal.

**3 Revocation**

The following instruments are revoked:

- (a) the *Radiocommunications Class Licence (Low Interference Potential Devices) 1997*;
- (b) the *Radiocommunications Class Licence (Low Interference Potential Devices) Variation 1998 (No. 1)*.

**Note**

A radiocommunications device supported under this Class Licence can be expected to be operating in radiofrequency spectrum also used by other radiocommunications devices (that is, it shares the spectrum with them). Devices supported under this Class Licence are typically used for communications over short distances.

By placing appropriate limits on parameters such as device type, radiated power levels and frequencies of operation, the interference potential of a low interference potential device (**LIPD**) may be held to a sufficiently low level that enables sharing the spectrum with other radiocommunications devices on an uncoordinated basis in most circumstances.

It is recognised that interference arising from the operation of a LIPD is still possible, although under less likely circumstances. As an aid to interference resolution in those circumstances, it is a condition of the operation of a device under this Class Licence that the device not cause interference to other radiocommunications devices; as well, a device will not be afforded protection from interference caused by other radiocommunications services (see paragraph 4 (1) (b) and Note 1 after section 4 of this Class Licence).

Should interference occur, the onus is on the user of a LIPD to take measures to resolve that interference, for example, by re-tuning or ceasing to operate the LIPD. Some LIPDs are designed so that they are able to be re-tuned, to assist the user in avoiding interference locally.

Some of the frequency bands mentioned in this Class Licence cover bands designated for industrial, scientific and medical (**ISM**) applications. ISM applications generate radio frequency energy and use it locally for non-radiocommunications applications (eg. microwave ovens). Radiocommunications services operating in ISM-designated bands may experience interference from ISM applications. In accordance with the internationally-recognised arrangements for interference resolution that apply in such bands, this Class Licence notes that radiocommunications devices operating in ISM-designated bands are not afforded protection from interference that may be caused by ISM applications (see Note 2 after section 4 of this Class Licence).

LIPDs are sometimes used for radio applications with commercial or safety-of-life implications. Users of such applications are encouraged to have particular regard to the suitability of operating under this Class Licence for their radiocommunications needs.

Some applications of LIPDs require that a device meet additional physical or technical requirements outside the scope of this Class Licence. The use, marketing and supply of such devices in Australia may be dependant on the approval of the appropriate regulatory body, such as the Therapeutic Goods Administration or State Government Authorities.

Manufacturers and suppliers of radiocommunications products able to be supported under this Class Licence are encouraged to have regard to the information in this note when forming advice about the suitability of their products for the intended application of the

**Section 3A**

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products

by

customers.

### 3A Definitions

In this Class Licence:

*Act* means the *Radiocommunications Act 1992*.

*broadcasting service* has the meaning given by the *Broadcasting Services Act 1992*.

*commercial broadcasting service* has the meaning given by the *Broadcasting Services Act 1992*.

*commercial television broadcasting licence* has the meaning given by the *Broadcasting Services Act 1992*.

*community broadcasting licence* has the meaning given by the *Broadcasting Services Act 1992*.

*community broadcasting service* has the meaning given by the *Broadcasting Services Act 1992*.

*community television broadcasting licence* has the meaning given by the *Broadcasting Services Act 1992*.

*community television broadcasting service* means a community broadcasting service that provides television programs.

*coverage area*, for a broadcasting station or a datacasting station, means:

- (a) if the station is used to provide a commercial television broadcasting service or community television broadcasting service – the area within the licence area where the median field strength  $E(50,50)$  of the transmission made by the station, at 10m above ground level, is at least the specified limit.
- (b) in any other case – the area where the median field strength  $E(50,50)$  of a transmission made by the station at 10m above ground level, is at least the specified limit.

*DAB* means digital audio broadcasting.

*device compliance day*, for a device, means the most recent of the following days:

- (a) if the device was manufactured in Australia — the day it was manufactured; and
- (b) if the device was manufactured overseas and imported — the day it was imported; and
- (c) if the device was altered or modified in a material respect — the day it was altered or modified.

*ERP* means effective radiated power.

*ETSI* means the European Telecommunications Standards Institute.

*infrared device* means a radiocommunications device having a radio emission in the frequency range 187.5 THz to 420 THz.

*licence area* means:

- (a) in relation to a broadcasting station used to provide a commercial television broadcasting service – the licence area designated for the relevant commercial television broadcasting licence under section 29 of the *Broadcasting Services Act 1992*;
- (b) in relation to a broadcasting station used to provide a community broadcasting service, other than a service provided under a temporary community broadcasting licence – the licence area designated for the relevant community television broadcasting licence under section 29 of the *Broadcasting Services Act 1992*;
- (c) in relation to a broadcasting station used to provide a community broadcasting service provided under a temporary community broadcasting licence – the licence area designated for the relevant temporary community broadcasting licence under section 92G of the *Broadcasting Services Act 1992*.

**low interference potential device** means a radiocommunications device that complies with the conditions set out in this Class Licence.

**maximum EIRP** means the largest amount of peak equivalent isotropically radiated power that is radiated in any direction from any of the following:

- (a) an antenna that is an integral part of the transmitter;
- (b) an antenna that is connected to the transmitter;
- (c) the surface of a specified enclosure containing the antenna;
- (d) for an item in Schedule 1 that mentions an opening and an underground environment — the opening to the underground environment.

**nominated distance of a specified Australian radio-astronomy site**, means:

- (a) within 10 km of Parkes Observatory located near Parkes (Latitude 32° 59' 59.8657" S Longitude 148° 15' 44.3591" E); or
- (b) within 10 km of Paul Wild Observatory located near Narrabri (Latitude 30° 18' 52.048" S Longitude 149° 32' 56.327" E); or
- (c) within 3 km of the Canberra Deep Space Communications Complex (Latitude 35° 23' 54" S Longitude 148° 58' 40" E); or
- (d) within 10 km of the Radio Astronomy Park in Western Australia (Latitude 26° 37' 13.4" S Longitude 117° 30' 40" E).

**radio broadcasting service** means a broadcasting service that provides radio programs.

**radio program** has the meaning given by the *Broadcasting Services Act 1992*.

**specified limit**, in relation to the median field strength E(50,50) of a transmission made by a station, means:

- (a) for a transmission in the band 174-230 MHz, in respect of a television broadcasting service: 44 dBuV/m;
- (b) for a transmission in the band 174-230 MHz, in respect of a radio broadcasting service: 63 dBuV/m;
- (c) for a transmission in the band 520-610 MHz: 50 dBuV/m;
- (d) for a transmission in the band 610-694 MHz: 54 dBuV/m.

**television broadcasting service** means a broadcasting service that provides television programs.

**television program** has the meaning given by the *Broadcasting Services Act 1992*.

**temporary community broadcasting licence** has the meaning given by the *Broadcasting Services Act 1992*.

*Note* For the definition of other expressions used in this Class Licence, see the Act and the *Radiocommunications (Interpretation) Determination 2000*.

## 4 Class Licence

- (1) This Class Licence authorises a person to operate a transmitter included in a class of transmitters mentioned in an item in Schedule 1, subject to the following conditions:
- (a) the transmitter must be operated:
    - (i) on a frequency, or within a range of frequencies, mentioned in the item; and
    - (ii) at a radiated power that does not exceed the maximum EIRP mentioned in the item; and
    - (iii) within the limitations (if any) mentioned in the item;
  - (b) the transmitter's operation must not cause interference to the operation of radiocommunications services;
  - (c) without limiting paragraph (1) (b), the transmitter must not be operated on a frequency, or within a range of frequencies, between 70MHz and 25.25 GHz within 70 km distance from the Murchison Radioastronomy Observatory if the transmission will cause interference with the operation of radio astronomy observations by the observatory.

*Note* On the day on which the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2011 (No.1)* comes into force, the Murchison Radioastronomy Observatory is situated at latitude 26.704167 South, longitude 116.658889 East (GDA94).

- (2) The frequency, or range of frequencies, and the maximum EIRP mentioned in an item in Schedule 1 must be construed in accordance with the interpretative provisions (if any) mentioned in the item.

*Note 1* A low interference potential device will not be afforded protection from interference caused by other radiocommunications devices. A low interference potential device operated under this Class Licence is generally not expected to suffer interference. However, an individual low interference potential device may experience, from other radiocommunications devices, interference arising from the particular circumstances of the device's operation.

*Note 2* In accordance with the requirements of footnote AUS 32 and footnote 150 to the Table of Allocations in the Australian Radiofrequency Spectrum Plan, a low interference potential device will not be afforded protection from interference that may be caused by ISM applications in the ISM bands 13.553 MHz – 13.567 MHz, 26.957 MHz – 27.283 MHz, 40.66 MHz – 40.70 MHz, 918 MHz – 926 MHz, 2 400 MHz – 2 500 MHz, 5 725 MHz – 5 875 MHz and 24 000 MHz – 24 250 MHz.

*Note 3* Australia/New Zealand Standard AS/NZS 2211.10:2004 details the requirements that are necessary to protect persons from radiation from laser devices, many of which are authorised by this Class Licence.

## 5 Standards

- (1) Each of the following radiocommunications devices must comply with the *Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard* 1999:

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- (a) a handset, for a cellular mobile telephone service, that has a device compliance day on or after 22 November 2000;
  - (b) a handset, for a cordless telephone service, that has a device compliance day on or after 22 November 2000;
  - (c) a land station (*cradle*) that:
    - (i) is used in a cordless telephone service; and
    - (ii) has a device compliance day on or after 22 November 2000.
- (2) In addition, if the device compliance day for a device authorised under this class licence is:
- (a) on or after the date of commencement of the *Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2001 (No. 1)*; or
  - (b) in relation to an infrared device — on or after 13 February 2002;  
the device must comply with any standard applicable to the device on its device compliance day, as in force on that day.

*Note 1* ACMA confirms that if a standard mentioned in subsection (2) is amended or replaced by another standard after the device compliance day for the device, the device need not comply with the new or amended standard.

*Note 2* Section 5 of the Act provides that *standard* means a standard made under section 162 of that Act.



# Schedule 1 Transmitters

(section 4)

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
1	All transmitters	0.000–0.014	200 $\mu$ W	
2	All transmitters	0.014–0.01995	50 $\mu$ W	
3	All transmitters	0.02005–0.07	7.5 $\mu$ W	
4	All transmitters	0.07–0.16	3 $\mu$ W	
5	All transmitters	1. 0.16–0.285 2. 0.325–0.415	500 nW	
6	All transmitters	3.025–3.155	7.5 nW	
7	All transmitters	3.5–3.7	30 pW	
8	All transmitters	1. 3.7–3.95 2. 4.438–4.65	7.5 nW	
9	All transmitters	13.553–13.567	100 mW	
10	All transmitters	24–24.89	10 mW	
11	All transmitters	26.957–27.283	1 W	<ol style="list-style-type: none"> <li>1. Separation of the operating frequency from the centre frequency of any adjacent citizen band radio channel must be at least 5 kHz.</li> <li>2. The emission bandwidth must not exceed 10 kHz.</li> </ol>
12	All transmitters	1. 29.7–29.72 2. 30–30.0625 3. 30.3125–31 4. 36.6–37 5. 39–39.7625 6. 40.25–40.66	100 mW	
13	All transmitters	40.66–41	1 W	
14	All transmitters	54–56	2.5 mW	
15	All transmitters	1. 70–70.24375 2. 77.29375– 77.49375 3. 150.7875– 152.49375 4. 173.29375–174	100 mW	

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
16	All transmitters	1. 225–242 2. 244–267 3. 273–303.95 4. 304.05–328.6 5. 335.4–399.9	10 $\mu$ W	
17	All transmitters	433.05–434.79	25 mW	
18	All transmitters	915–928	3 mW	
19	All transmitters	2400–2483.5	10 mW	
19A	All transmitters	5725–5875	25 mW	
20	All transmitters	1. 10500–10550 2. 24000–24250 3. 61000–61500	100 mW	
21	Wireless audio transmitters and auditory assistance transmitters	88–108	10 $\mu$ W	<ol style="list-style-type: none"> <li>1. Emission must be frequency modulated and have a maximum bandwidth of 180 kHz.</li> <li>2. Transmission in a radio channel must not originate in the licence area of a radio broadcasting station (including a repeater or translator station) operating in the same channel.</li> </ol>
22	Wireless audio transmitters	174–230	3 mW (~1.82 mW ERP)	<ol style="list-style-type: none"> <li>1. Emission must be frequency modulated and have a maximum bandwidth of 330 kHz.</li> <li>2. Transmission in a channel must not originate in the coverage area of a broadcasting station or datacasting service station (including a repeater or translator station) operating in the same channel.</li> </ol>

Schedule 1

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
22A	Wireless audio transmitters	<ol style="list-style-type: none"> <li>1. 520 – 820 (until 31 December 2014)</li> <li>2. 520– 694 (from 1 January 2015)</li> </ol>	100 mW (~60.95 mW ERP)	<ol style="list-style-type: none"> <li>1. Wireless audio transmitters must not be operated in the frequency range 694-820 MHz after 31 December 2014.</li> <li>2. Emission must be frequency modulated and have a maximum bandwidth of 330 kHz.</li> <li>3. Transmission in a broadcasting services band channel must not originate in the coverage area of a broadcasting station or a datacasting service station (including a repeater or translator station) operating in the same channel.</li> </ol>
22B	Digitally modulated wireless audio transmitters	520-694 MHz	100 mW (~60.95 mW ERP)	<ol style="list-style-type: none"> <li>1. Emission must have a maximum bandwidth of 330 kHz.</li> <li>2. Transmission in a broadcasting services bands channel must not originate in the coverage area of a broadcasting station or a datacasting service station (including a repeater or translator station) operating in the same channel.</li> </ol>
22C	Wireless audio transmitters	1790 – 1800 MHz	100 mW (~60.95 mW ERP)	<ol style="list-style-type: none"> <li>1. A transmitter mentioned in this item must comply with either ETSI Standard EN 301 840 or ETSI Standard EN 300 422.</li> </ol>

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
22D	Indoor wireless audio transmitters	520-694	100 mW (~60.95 mW ERP)	1. A transmitter mentioned in this item must only be operated indoors. 2. A transmitter mentioned in this item must comply with either ETSI Standard EN 301 357 or ETSI Standard EN 300 422.
23	Biomedical telemetry transmitters	174-230	10 $\mu$ W	
24	Biomedical telemetry transmitters	520-668	11 mW	1. Transmission in a channel must not originate in the coverage area of a broadcasting station or datacasting service station (including a repeater or translator station) operating in the same channel.
25	Telecommand or telemetry transmitters	472.0125-472.1125	100 mW	
25A	Telecommand or telemetry transmitters	1. 0.07-0.119 2. 0.135-0.160	10 mW	
25B	Telecommand or telemetry transmitters	0.119-0.135	1.5 W	
26	Telecommand or telemetry transmitters	1. 2400-2450 2. 5725-5795 3. 5815-5875	1 W	
27	Telecommand or telemetry transmitters	5795-5815	2 W	
28	Auditory assistance transmitters	3.155-3.4, with a carrier frequency of: (a) 3.175 MHz; or (b) 3.225 MHz; or (c) 3.275 MHz; or (d) 3.325 MHz.	60 $\mu$ W	

Schedule 1

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
29	Auditory assistance transmitters	<ol style="list-style-type: none"> <li>1. 41–42, with a carrier frequency of:               <ol style="list-style-type: none"> <li>(a) 41.55 MHz; or</li> <li>(b) 41.65 MHz; or</li> <li>(c) 41.75 MHz; or</li> <li>(d) 41.85 MHz; or</li> <li>(e) 41.95 MHz.</li> </ol> </li> <li>2. 43–44, with a carrier frequency of:               <ol style="list-style-type: none"> <li>(a) 43.05 MHz; or</li> <li>(b) 43.15 MHz; or</li> <li>(c) 43.25 MHz; or</li> <li>(d) 43.35 MHz; or</li> <li>(e) 43.45 MHz.</li> </ol> </li> </ol>	1.3 mW	
30	Radiofrequency identification transmitters	<ol style="list-style-type: none"> <li>1. 1.77–2.17</li> <li>2. 2.93–3.58</li> <li>3. 7.2–10.01</li> </ol>	100 pW	
31	Radiofrequency identification transmitters	<ol style="list-style-type: none"> <li>1. 13.553–13.567</li> <li>2. 918–926</li> <li>3. 2400–2450</li> <li>4. 5725–5795</li> <li>5. 5815–5875</li> <li>6. 24000–24250</li> </ol>	1 W	
32	Radiofrequency identification transmitters	5795–5815	2 W	

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
32A	Radiofrequency identification transmitters	920–926	4 W	<ol style="list-style-type: none"> <li>1. A transmitter mentioned in this item must comply with ISO/IEC 18000-6c (RFID Gen. 2).</li> <li>2. Emissions in the band below 917.75 MHz must be no greater than -37 dBm EIRP.</li> <li>3. Emissions above 926 MHz must be no greater than -33 dBm EIRP.</li> <li>4. A transmitter mentioned in this item must not be used unless more than 1 Watt EIRP is necessary to achieve satisfactory system performance.</li> </ol>
<p><i>Note</i> ISO/IEC 18000-6c (RFID Gen. 2) refers to an international standard published by the International Organization for Standardization (ISO). The international standard is included in a document titled <i>Information Technology — Radio frequency identification for item management — Part 6: Parameters for air interface communications at 860 MHz to 960 MHz</i>. The document is numbered <i>ISO/IEC 18000-6:2004</i> and is available on the internet at <a href="http://www.saiglobal.com">http://www.saiglobal.com</a>.</p>				
32B	Radiofrequency identification transmitters	22000 – 23480 24100 - 26500	630 mW	<ol style="list-style-type: none"> <li>1. A transmitter mentioned in this item must only be operated indoors.</li> <li>2. Must not be operated within a nominated distance of a specified Australian radio-astronomy site.</li> </ol>
33	Alarm transmitters (including security and personal safety transmitters)	303.60–304.05	100 $\mu$ W	
34	Home detention monitoring equipment	314.075–314.325	200 $\mu$ W	In a 10 second period, a single transmission must not exceed 10 milliseconds.
35	Radiodetermination transmitters	24000–24250	1 W	
36	Radiodetermination transmitters	60000–61000	20 mW	

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
37	Transmitters used for underground communications	<ol style="list-style-type: none"> <li>1. 31–32</li> <li>2. 33–34</li> <li>3. 35–36</li> <li>4. 37–38</li> <li>5. 42–43</li> <li>6. 44–45</li> <li>7. 70.24375–74.8</li> <li>8. 75.2–77.29375</li> <li>9. 77.49375–84.69375</li> <li>10. 149.25–149.9</li> <li>11. 150.05–151.39375</li> <li>12. 152.49375–156</li> <li>13. 157.45–160.6</li> <li>14. 160.975–161.475</li> <li>15. 162.05–173.29375</li> <li>16. 403–406</li> <li>17. 406.1–420</li> <li>18. 450–500.99375</li> <li>19. 504.99375–510.99375</li> <li>20. 514.99375–520</li> </ol>	3.5 nW	The maximum EIRP applies at an above-ground opening associated with the underground communications.
38	Transmitters used for underground communications	<ol style="list-style-type: none"> <li>1. 0.5265–1.605</li> <li>2. 87.5–108</li> <li>3. 174–2304. 519-820 (until 31 December 2014)</li> <li>5. 519-694 (from 1 January 2015)</li> </ol>	10 $\mu$ W	<ol style="list-style-type: none"> <li>1. The maximum EIRP applies to emissions from an above-ground opening associated with the underground environment.</li> <li>2. For the augmentation of an above-ground broadcasting service and datacasting service in underground tunnels.</li> <li>3. Transmitters must not be operated in the frequency range 694-820 MHz after 31 December 2014.</li> </ol>
38A	In-store DAB repeater transmitters	174-230	10 $\mu$ W	<ol style="list-style-type: none"> <li>1. The maximum EIRP applies to emissions measured outside the building.</li> <li>2. For the augmentation of the co-channel DAB broadcasting services operating in the area.</li> </ol>

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
39	Aquatic animal tracking transmitters	48–49	10 mW	
40	Radiodetermination transmitters operated in radiofrequency-shielded enclosures	<ol style="list-style-type: none"> <li>1. 5250–7000</li> <li>2. 8500–10600</li> <li>3. 24050–26500</li> <li>4. 75000–85000</li> </ol>	75 nW	<ol style="list-style-type: none"> <li>1. The maximum EIRP applies outside the shielded room enclosure.</li> <li>2. The transmitter must meet the requirements of European Telecommunications Standards Institute (<i>ETSI</i>) Standard 302 372-1 as existing from time to time.</li> </ol>
41	Personal alarm transmitters	27.500–27.510	100 $\mu$ W	
42	Transmitters used with personal alarm transmitters operating in the frequency band 27.500–27.510 MHz	27.500–27.510	500 mW	Each transmission must not exceed 4 seconds over a 60 second period.
43	Alarm transmitters	344.8–345.2	1 mW	<p>The average EIRP must not exceed 100 <math>\mu</math>W:</p> <ol style="list-style-type: none"> <li>(a) if the length of a pulse train does not exceed 0.1 second — in the length of one complete pulse train; or</li> <li>(b) if the length of a pulse train exceeds 0.1 second — in the 0.1 second period during which the EIRP is at its maximum value; or</li> <li>(c) if a transmitter operates for more than 0.1 second — in the 0.1 second period during which the EIRP is at its maximum value.</li> </ol>



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Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
44	Radio Local Area Network transmitters used indoors	5150–5250	200 mW (averaged over the entire transmission burst)	<ol style="list-style-type: none"> <li>1. If the emission bandwidth is 1 MHz or greater, the spectral density in any 1 MHz is limited to 10 mW EIRP per MHz.</li> <li>2. If the emission bandwidth is less than 1 MHz, the spectral density in any 4 kHz is limited to 40 <math>\mu</math>W EIRP per 4 kHz.</li> </ol>
44A	Radio Local Area Network transmitters used indoors	5250–5350	200 mW (averaged over the entire transmission burst)	<ol style="list-style-type: none"> <li>1. If the emission bandwidth is 1 MHz or greater, the spectral density in any 1 MHz is limited to 10 mW EIRP per MHz.</li> <li>2. If the emission bandwidth is less than 1 MHz, the spectral density in any 4 kHz is limited to 40 <math>\mu</math>W EIRP per 4 kHz.</li> <li>3. From 1 January 2006 devices operated for the first time must use Dynamic Frequency Selection (DFS) and Transmit Power Control (TPC). If TPC is not used then the maximum EIRP is limited to 100 mW.</li> </ol>
45	Digital modulation transmitters	915–928	1 W	<ol style="list-style-type: none"> <li>1. The radiated peak power spectral density in any 3 kHz is limited to 25 mW per 3 kHz.</li> <li>2. The minimum 6 dB bandwidth must be at least 500 kHz.</li> </ol>

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
45A	Digital modulation transmitters	2400–2483.5	4 W	<ol style="list-style-type: none"> <li>The radiated peak power spectral density in any 3 kHz is limited to 25 mW per 3 kHz.</li> <li>The minimum 6 dB bandwidth must be at least 500 kHz.</li> </ol>
45B	Digital modulation transmitters	5725–5850	4 W	<ol style="list-style-type: none"> <li>The radiated peak power spectral density in any 3 kHz is limited to 25 mW per 3 kHz.</li> <li>The minimum 6 dB bandwidth must be at least 500 kHz.</li> </ol>
46	Radio Local Area Network transmitters	<ol style="list-style-type: none"> <li>5470–5600</li> <li>5650–5725</li> </ol>	1 W (averaged over the entire transmission burst)	<ol style="list-style-type: none"> <li>The maximum radiated mean power density must not exceed 50 mW/MHz EIRP in any 1 MHz band.</li> <li>Must use Dynamic Frequency Selection (DFS) and Transmit Power Control (TPC). If TPC is not implemented, then the maximum EIRP is limited to 500 mW.</li> </ol>
48	Radiodetermination transmitters	76000–77000	25 W	
48A	Radiodetermination transmitters	75000 – 85000	See limitations	<ol style="list-style-type: none"> <li>A transmitter mentioned in this item must be operated in a position such that emissions are directed towards the ground or a floor or wall of a building or similar structure.</li> <li>Must comply with ETSI standard EN 302 729.</li> </ol>

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
49	Medical implant communications systems transmitters	402–405	25 $\mu$ W	<ol style="list-style-type: none"> <li>3. Must not be operated within a nominated distance of a specified Australian radio-astronomy site.</li> <li>1. The maximum EIRP applies outside the body.</li> <li>2. A transmitter mentioned in this item must comply with ETSI EN 301 839-2.</li> </ol>

*Note 1* The systems and associated medical implant communications systems transmitters mentioned in item 49 are devices that require marketing approval from the Therapeutic Goods Administration.

*Note 2* At the time this item commenced, ETSI EN 301 839-2 referred to a standard titled *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Ultra Low Power Active Medical Implants (ULP-AMI) and Peripherals (ULP-AMI-P) operating in the frequency range 402 MHz to 405 MHz; Part 2 Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive*. The standard is available on the internet at <http://www.etsi.org>.

49A	Medical implant communications systems transmitters	<ol style="list-style-type: none"> <li>1. 401–402</li> <li>2. 405–406</li> </ol>	25 $\mu$ W	<ol style="list-style-type: none"> <li>1. The maximum EIRP applies outside the body.</li> <li>2. A transmitter mentioned in this item must comply with ETSI EN 302 537-2.</li> </ol>
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*Note 1* The systems and associated medical implant communications systems transmitters mentioned in item 49A are devices that require marketing approval from the Therapeutic Goods Administration.

*Note 2* At the time this item commenced, ETSI EN 302 537-2 referred to a standard titled *Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Ultra Low Power Medical Data Service Systems operating in the frequency range 401 MHz to 402 MHz and 405 MHz to 406 MHz; Part 2: Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive*. The standard is available on the internet at <http://www.etsi.org>.

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
51	Data communications transmitters used outdoors	59000–63000	150 W	<ol style="list-style-type: none"> <li>1. Transmitters are limited to land and maritime deployments.</li> <li>2. Maximum transmitter power must be 20 mW or less.</li> <li>3. Spurious emissions outside the band must be less than -30dBm/MHz.</li> <li>4. For outdoor use only.</li> </ol>
51A	Data communications transmitters used indoors	57000–66000	20 W	<ol style="list-style-type: none"> <li>1. The average power density of any emission must not exceed 9 uW/cm<sup>2</sup> at a distance of 3m.</li> <li>2. The peak power density of any emission must not exceed 18 uW/cm<sup>2</sup> at a distance of 3m.</li> <li>3. Spurious emissions outside the band must be less than -30dBm/MHz.</li> </ol>
52	Frequency hopping transmitters	915–928	1 W	A minimum of 20 hopping frequencies must be used.
53	Frequency hopping transmitters	2400–2483.5	500 mW	A minimum of 15 hopping frequencies must be used.
54	Frequency hopping transmitters	2400–2483.5	4 W	A minimum of 75 hopping frequencies must be used.
55	Frequency hopping transmitters	5725–5850	4 W	A minimum of 75 hopping frequencies must be used.
56	Ultra-wideband short-range vehicle radar systems	22000–26500	See limitations	<ol style="list-style-type: none"> <li>1. The maximum radiated average power density is -41.3 dBm/MHz EIRP.</li> </ol>

Schedule 1

Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
				<ol style="list-style-type: none"> <li>2. The maximum broadband radiated peak power density is 0 dBm/50 MHz EIRP.</li> <li>3. Must meet the requirements of ETSI 302-288-1 as it applies from time to time.</li> <li>4. Must not be operated within a nominated distance of a specified Australian radio-astronomy site.</li> </ol>
57	Infrared transmitters	187.5 THz–420 THz	125 mW (output power)	
58	Video sender transmitters	<ol style="list-style-type: none"> <li>1. 529-806 (from 31 December 2014)</li> <li>2. 529-694 (from 1 January 2015)</li> </ol>	12 µW	<ol style="list-style-type: none"> <li>1. Video sender transmitters must not be operated in the frequency range 694-806 MHz after 31 December 2014.</li> </ol>
59	In-store pricing system transmitters	0.0366– 0.0402	4.8 W	Indoor use only.
60	Radiodetermination transmitters	77000–81000	315 W	<ol style="list-style-type: none"> <li>1. Must meet the requirements of ETSI EN 302 264-1 as it applies from time to time.</li> <li>2. Must not be operated within a nominated distance of a specified Australian radio-astronomy site.</li> </ol>
61	Ultra-wideband transmitter	6000 – 8400	See limitations	<ol style="list-style-type: none"> <li>1. A transmitter mentioned in this item must comply with either ETSI Standard EN 302 500 or ETSI Standard EN 302 065</li> </ol>

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Item	Class of transmitter	Permitted operating frequency band (MHz) (lower limit exclusive, upper limit inclusive)	Maximum EIRP	Limitations
				<hr/> <ol style="list-style-type: none"><li>2. Must not be operated on board any aircraft or from any fixed outdoor location.</li><li>3. Must not be operated within a nominated distance of a specified Australian radio-astronomy site.</li></ol> <hr/>

## Notes to the *Radiocommunications (Low Interference Potential Devices) Class Licence 2000*

### Note 1

The *Radiocommunications (Low Interference Potential Devices) Class Licence 2000* (in force under sections 132 and 135 of the *Radiocommunications Act 1992*) as shown in this compilation is amended as indicated in the Tables below.

### Table of Instruments

Title	Date of notification in Gazette or FRLI registration	Date of commencement	Application, saving or transitional provisions
<i>Radiocommunications (Low Interference Potential Devices) Class Licence 2000</i>	5 July 2000 (see Gazette 2000, No. GN26)	5 July 2003	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2000 (No. 1)</i>	22 Nov 2000 (see Gazette 2000, No. GN46)	22 Nov 2000	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2001 (No. 1)</i>	26 Sept 2001 (see Gazette 2001, No. GN38)	26 Sept 2001	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2003 (No. 1)</i>	6 Aug 2003 (see Gazette 2003, No. GN31)	6 Aug 2003	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2005 (No. 1)</i>	23 Aug 2005 (see F2005L02339)	24 Aug 2005	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2006 (No. 1)</i>	25 July 2006 (see F2006L02420)	26 July 2006	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation 2007 (No. 1)</i>	3 Jan 2008 (see F2008L00007)	4 Jan 2008	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2008 (No. 1)</i>	15 Jan 2009 (see F2009L00038)	16 Jan 2009	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2009 (No. 1)</i>	30 June 2009 (see F2009L02617)	1 July 2009	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2010 (No. 1)</i>	9 Sept 2010 (see F2010L02428)	15 Sept 2010 (see s. 2 (b) and Gazette 2010, No. GN36)	

Title	Date of notification in Gazette or FRLI registration	Date of commencement	Application, saving or transitional provisions
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2011 (No. 1)</i>	22 July 2011 (see F2011L01525)	27 July 2011 (see s. 2 (b) and <i>Gazette</i> 2011, No. GN29)	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2013 (No 1)</i>	30 April 2013 (see F2013L00711)	1 May 2013 (see s. 2(b) and <i>Gazette</i> 2013, No. GN17)	
<i>Radiocommunications (Low Interference Potential Devices) Class Licence Variation Notice 2014 (No. 1)</i>	7 July 2014 (see F2014L00963)	8 July 2014 (see s.2(b) and <i>Gazette</i> 2014, No C2014G01084)	



## Table of Amendments

ad. = added or inserted    am. = amended    rep. = repealed    rs. = repealed and substituted

<b>Provision affected</b>	<b>How affected</b>
Note to s. 3.....	am. 2000 No. 1; 2001 No. 1 rs. 2005 No. 1
S. 3A .....	ad. 2001 No. 1 am. 2006 No. 1; 2007 No.1; 2008 No. 1; 2009 No. 1; 2010 No. 1; 2014 No. 1
Note 1 to s. 3A .....	rep. 2007 No. 1
Note to s. 3A .....	ad. 2007 No. 1
Notes 1 and 2 to s. 4 (2).....	rep. 2001 No. 1
Note 3 to s. 4 (2) Renumbered Note 1.....	2001 No. 1
Note 4 to s. 4 (2) Renumbered Note 2.....	2001 No. 1
Note 3 to s. 4.....	ad. 2007 No. 1
S. 4.....	am. 2011 No. 1
Heading to s. 5 .....	rs. 2001 No. 1
S. 5.....	ad. 2000 No. 1 am. 2001 No. 1; 2007 No.1
<b>Schedule 1</b>	
Schedule 1 .....	am. 2000 No. 1 rs. 2001 No. 1 am. 2003 No. 1; 2005 No. 1; 2006 No. 1; 2007 No. 1; 2008 No. 1; 2009 No. 1; 2010 No. 1; 2013 No.1; 2014 No.1