

Regulatory Update

Updated UWB and SRD regulations published in UAE

UAE Telecommunications Regulatory Authority (TRA) has confirmed updated Ultra-Wide Band and Short Range Devices requirements in recently published Regulation (Version 2.0) as a written summary of already established requirements.

These requirements have been developed in line with European Standards and requirements in ITU-Region 1 countries for these technologies and do not elicit to any changes.

Main requirements for UWB devices are listed below:

- Generic UWB devices shall comply with EN 302 065 -1.
- UWB devices for location tracking shall comply with EN 302 500-1.
- UWB devices for Building Material Analysis shall comply with EN 302 435-1.

Main usage requirements for SRD devices are listed in the table below:

| Frequency range | Usage | Transmit power / Magnetic field | Duty cycle | Channel Spacing | Reference |
|-----------------------|--|---------------------------------|--------------|-----------------|------------|
| 11810 kHz - 12660 kHz | Inductive applications | -16 dB μ A/m at 10m | | | EN 300 330 |
| 12500 kHz - 20000 kHz | Active Medical Implants and their associated peripherals | -7 dB μ A/m at 10m | $\leq 10 \%$ | | EN 300 330 |
| 13553 kHz - 13567 kHz | Non-specific | 42 dB μ A/m at 10m | | | EN 300 330 |
| 13553 kHz - 13567 kHz | RFID and EAS | 60 dB μ A/m at 10m | | | EN 300 330 |
| 13567 kHz - 13660 kHz | Inductive applications | 27 dB μ A/m at 10m | | | EN 300 330 |

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| 13660 kHz - 13710 kHz | Inductive applications | 9 dB μ A/m at 10m | | | EN 300 330 |
| 13710 kHz - 14010 kHz | Inductive applications | -3.5 dB μ A/m at 10m | | | EN 300 330 |
| 14010 kHz - 14460 kHz | Inductive applications | -10 dB μ A/m at 10m | | | EN 300 330 |
| 14460 kHz - 15310 kHz | Inductive applications | -16 dB μ A/m at 10m | | | EN 300 330 |
| 26957 kHz - 27283 kHz | Non-specific | 42 dB μ A/m at 10m 10 mW e.r.p | | | EN 300 330 |
| 26995, 27045, 27095, 27145, 27195 kHz | Non-specific | 100 mW e.r.p | ≤ 0.1 % | ≤ 10 kHz | EN 300 220 |
| 29.7 MHz - 47.0 MHz | Radio microphone applications | 10 mW e.r.p | | ≤ 50 kHz | EN 300 422 |
| 30 MHz - 37.5 MHz | Active Medical Implants and their associated peripherals | 1 mW e.r.p | ≤ 10 % | | EN 302 510 |
| 34.995 MHz - 35.225 MHz | Model control | 100 mW e.r.p | | 10 kHz | EN 300 220 |
| 40.66 MHz - 40.7 MHz | Non-specific | 10 mW e.r.p | | | EN 300 220 |
| 40.665, 40.675, 40.685, 40.695 MHz | Model control | 100 mW e.r.p | | ≤ 10 kHz | EN 300 220 |
| 72 MHz - 72.25 MHz | Model control | 10 mW e.r.p | | ≤ 10 kHz | EN 300 220 |
| 87.5 MHz - 108 MHz | Wireless audio applications | 50 nW e.r.p | | ≤ 200 kHz | EN 301 357 |
| 138.2 MHz - 138.45 MHz | Non-specific | ≤ 10 mW e.r.p | | | EN 300 220 |
| 169.4 MHz - 169.475 MHz | Non-specific | 10 mW e.r.p | ≤ 0.1 % | | EN 300 220 |
| 169.4 MHz - 169.475 MHz | Tracking, tracing and data acquisition | 500 mW e.r.p | ≤ 1.0 % | ≤ 50 kHz | EN 300 220 |
| 169.4 MHz - 169.475 MHz | Aids for the hearing impaired | 500 mW e.r.p | ≤ 10 % | ≤ 50 kHz | EN 300 422 |
| 169.475 MHz - 169.4875 MHz | Non-specific | 10 mW e.r.p | ≤ 0.1 % | | EN 300 220 |
| 169.475 MHz - 169.4875 MHz | Aids for the hearing impaired | 10 mW e.r.p | | ≤ 50 kHz | EN 300 422 |
| 169.4875 MHz - 169.5875 MHz | Non specific | 10 mW e.r.p | ≤ 0.001 % (06h00 - 24h00) ≤ 0.1 % (00h00 - | Non-specific | EN 300 220 |

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| | | | 06h00) | | |
| 169.4875 MHz - 169.5875 MHz | Aids for the hearing impaired | 500 mW e.r.p | | ≤ 50 kHz | EN 300 422 |
| 169.5875 MHz - 169.8125 MHz | Non-specific | 10 mW e.r.p | ≤ 0.1 % | | EN 300 220 |
| 169.5875 MHz - 169.8125 MHz | Aids for the hearing impaired | 10 mW e.r.p | | ≤ 50 kHz | EN 300 422 |
| 169.4 MHz - 174 MHz | Aids for the hearing impaired | 10 mW e.r.p | | ≤ 50 kHz | EN 300 422 |
| 312 MHz - 315 MHz | Keyless car entry | 50 mW e.r.p | | | EN 300 220 |
| 401 MHz - 402 MHz | Active Medical Implants and their associated peripherals | 25 uW e.r.p | | ≤ 100 kHz | EN 302 537 |
| 402 MHz - 405 MHz | Active Medical Implants and their associated peripherals | 25 uW e.r.p | | ≤ 300 kHz | EN 301 839 |
| 405 MHz - 406 MHz | Active Medical Implants and their associated peripherals | 25 uW e.r.p | | ≤ 100 kHz | EN 302 537 |
| 433.05 MHz - 434.79 MHz | Non-specific | 1 mW e.r.p | | | EN 300 220 |
| 433.05 MHz - 434.79 MHz | Non-specific | 10 mW e.r.p | ≤ 10 % | | EN 300 220 |
| 433.05 MHz - 434.79 MHz | LPD 433 | 10 mW e.r.p | | 25 kHz | EN 300 220 |
| 446 MHz - 446.2 MHz | PMR 446 | 500 mW | | | TS 102 490 |
| 863 MHz - 870 MHz | Non-specific | 25 mW e.r.p | ≤ 0.1 % Or LBT | | EN 300 220 |
| 863 MHz - 870 MHz | SRD860 | 10 mW e.r.p | | 25 kHz | |
| 868.7 MHz – 869.2 MHz | Automatic Meter Reading | 25 mW e.r.p | | | EN 300 220 |
| 869.4 MHz - 869.65 MHz | Non-specific | 500 mW e.r.p | ≤ 10% or LBT + AFA | ≤ 25 kHz | EN 300 220 |
| 865 MHz - 865.6 MHz | RFID | 100 mW e.r.p | | ≤ 200 kHz | EN 302 208 |
| 865.6 MHz - 867.6 MHz | RFID | 2 W e.r.p | | ≤ 200 kHz | EN 302 208 |
| 867.6 MHz - 868 MHz | RFID | 500 mW e.r.p | | ≤ 200 kHz | EN 302 208 |
| 870 MHz - 875.4 MHz | Non-specific | 10 mW e.r.p | | | EN 300 220 |
| 870 MHz - 875.8 MHz | Non-specific | 25 mW e.r.p | ≤ 1 % | ≤ 600 kHz | EN 300 220 |
| 870 MHz - 876 | Non-specific | 25 mW e.r.p | ≤ 0.1 | ≤ 200 kHz | EN 300 220 |

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| MHz | | | % | | |
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| 870 MHz - 875.6 MHz | Tracking, tracing and data acquisition | 500 mW e.r.p | ≤ 2.5% and APC ² | ≤ 200 kHz | EN 303 204 |
| 870 MHz - 875.8 MHz | Transport and traffic telematics | 500 mW e.r.p (vehicle to vehicle) 100 mW e.r.p. (in vehicle application) | ≤ 0.1 % ³ | ≤ 500 kHz | EN 300 200 |
| 915 MHz - 918 MHz | Non-specific | 25 mW e.r.p | ≤ 0.1 % | ≤ 200 kHz | EN 300 220 |
| 918 MHz - 921 MHz | Non-specific | 25 mW e.r.p | ≤ 0.01% | ≤ 200 kHz | EN 300 220 |
| 916.1 - 920.1 MHz | Radio microphone applications including aids for the hearing impaired | 10 mW e.r.p | ≤ 25 % | ≤ 400 kHz | EN 300 422 |
| 915 - 921 MHz | RFID | 4W e.r.p | | ≤ 400 kHz | EN 302 208 |
| 1785 - 1804.8 MHz | Radio microphone applications including aids for the hearing impaired | 50 mW e.i.r.p | | | EN 300 422 |
| 1795 - 1800 MHz | Wireless audio applications | 20 mW e.i.r.p | | | EN 301 357 |
| 1880 MHz - 1900 MHz | DECT applications including Cordless Telephony | 250 mW e.i.r.p | | | ITU-R M.1033-1 EN 300 175 |
| 2400 MHz – 2483.5 MHz | Wideband data transmission (e.g. WLAN, PMR over WLAN) | 100 mW e.i.r.p. | | | EN 300 328 |
| 2400 MHz – 2483.5 MHz | Non-specific | 10 mW e.i.r.p. | | | EN 300 440 |
| 2400 MHz – 2483.5 MHz | Radio determination applications | 25 mW e.i.r.p. | | | EN 300 440 |
| 2446 MHz - 2454 MHz | RFID | 500 mW | | | EN 300 761 EN 300 440 |
| 2446 MHz - 2454 MHz | RFID | 4 W | ≤ 15% + FHSS | | EN 300 440 |
| 4500 MHz - 7000 MHz | Tank level probing radar | -41.3 dBm/MHz e.i.r.p. outside the enclosed test tank structure | | | EN 302 372 |
| 5150 MHz - 5250 MHz | Broadband Radio Access Networks (e.g. RLAN). Indoor only | 200 mW e.i.r.p. (with and without) TPC | | | EN 301 893 TPC/DFS: EN 301 893 (Table D.1) |
| 5250 MHz - 5350 MHz | Broadband Radio Access Networks (e.g. | 100 mW e.i.r.p without TPC / 200 | | | EN 301 893 TPC/DFS: EN |

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| | RLAN). Indoor only | mW e.i.r.p with TPC | | | 301 893 (Table D.1) |
| 5470 MHz - 5725 MHz | Broadband Radio Access Networks (e.g. RLAN) | 500 mW e.i.r.p without TPC/ 1W e.i.r.p with TPC and DFS ⁵ | | | EN 301 893 TPC/DFS: EN 301 893 (Table D.1) |
| 5470 MHz - 5925 MHz | Broadband Radio Access Networks (e.g. RLAN) | 500 mW without TPC / 1W e.i.r.p with TPC and DFS | | | EN 301 893 TPC/DFS: EN 301 893 (Table D.1) |
| 5725 MHz - 5875 MHz | Non-specific | 50 mW e.i.r.p | | | EN 300 440 |
| 5725 MHz - 5875 MHz | Tracking, tracing and data acquisition | 400 mW e.i.r.p | | ≥ 1 MHz and ≤ 20 MHz | EN 303 258 |
| 5795 MHz - 5815 MHz | Transport and traffic telematics | 2W e.i.r.p | | | EN 300 674 |
| 8500 MHz - 10.6 GHz | Tank level probing radar | -41.3 dBm/MHz e.i.r.p. outside the enclosed test tank structure | | | EN 302 372 |
| 9200 MHz - 9975 MHz | Radiodetermination applications | 25 mW e.i.r.p | | | EN 300 440 |
| 10.5 GHz - 10.6 GHz | Radiodetermination applications | 500 mW e.i.r.p | | | EN 300 440 |
| 13.4 GHz - 14 GHz | Non-specific | 25 mW e.i.r.p | | | EN 300 440 |
| 17.1 GHz - 17.3 GHz | Non-specific | 100 mW e.i.r.p. | | | EN 300 440 |
| 17.1 GHz - 17.3 GHz | Radiodetermination applications | 400 mW (26 dBm) e.i.r.p | | | EN 300 440 |
| 24 GHz - 24.25 GHz | Non-specific | 100 mW e.i.r.p | | | EN 300 440 |
| 24.05 GHz - 27 GHz | Tank level probing radar | 20W (43 dBm) e.i.r.p. | | | EN 302 858 |
| 57 GHz - 64 GHz | Non-specific | 100 mW e.i.r.p; 13 dBm/MHz e.i.r.p. | | | EN 305 550 |
| 57 GHz - 64 GHz | Tank level probing radar | 400 mW (26 dBm) e.i.r.p | | | EN 302 372 |
| 57 GHz - 66 GHz | Broadband Radio Access Networks (e.g. RLAN) | 10 W (40 dBm) e.i.r.p | Spectrum sharing mechanism (e.g. LBT, DAA) | | EN 302 567 |
| 75 GHz - 85 GHz | Tank level probing radar | -41.3 dBm/MHz e.i.r.p. | | | EN 302 372 |

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| 75 GHz - 85 GHz | Radiodetermination applications | 400 mW (26 dBm) e.i.r.p | | | EN 302 729 |
| 76 GHz - 77 GHz | Railway applications and Transport and traffic telematics | 55 dBm e.i.r.p peak | | | EN 301 091 |
| 77.5 GHz - 78 GHz | Ground based short range radar including automotive radars | 45 dBm e.i.r.p peak | | | ITU-R M.2057 |
| 122 GHz - 123 GHz | Non-specific | 100 mW e.i.r.p | | | EN 305 550 |
| 244 GHz - 246 GHz | Non-specific | 100 mW e.i.r.p | | | EN 305 550 |

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