

Band name	Abbr	ITU band	Frequency Wavelength	Example uses
			< 3 Hz > 100,000 km	
Extremely low frequency	ELF	1	3–30 Hz 100,000 km – 10,000 km	Communication with submarines
Super low frequency	SLF	2	30–300 Hz 10,000 km – 1000 km	Communication with submarines
Ultra low frequency	ULF	3	300–3000 Hz 1000 km – 100 km	Communication within mines
Very low frequency	VLF	4	3–30 kHz 100 km – 10 km	Submarine communication, avalanche beacons , wireless heart rate monitors , geophysics
Low frequency	LF	5	30–300 kHz 10 km – 1 km	Navigation , time signals , AM longwave broadcasting
Medium frequency	MF	6	300–3000 kHz 1 km – 100 m	AM (Medium-wave) broadcasts
High frequency	HF	7	3–30 MHz 100 m – 10 m	Shortwave broadcasts, amateur radio and over-the-horizon aviation communications
Very high frequency	VHF	8	30–300 MHz 10 m – 1 m	FM , television broadcasts and line-of-sight ground-to-aircraft and aircraft-to-aircraft communications
Ultra high frequency	UHF	9	300–3000 MHz 1 m – 100 mm	television broadcasts, microwave ovens, mobile phones , wireless LAN , Bluetooth , and Two-Way Radios such as FRS and GMRS Radios
Super high frequency	SHF	10	3–30 GHz 100 mm – 10 mm	microwave devices, wireless LAN , most modern Radars
Extremely high frequency	EHF	11	30–300 GHz 10 mm – 1 mm	Radio astronomy , high-speed microwave radio relay
			Above 300 GHz < 1 mm	

General

Broadcast Frequencies:

Longwave AM Radio = 0Hz(LF)

Mediumwave AM Radio = 530kHz - 1710kHz (MF)

TV Band I (Channels 2 - 6) = 54MHz - 88MHz (VHF)

FM Radio Band II = 88MHz - 108MHz (VHF)

TV Band III (Channels 7 - 13) = 174MHz - 216MHz (VHF)

TV Bands == IV == & V (Channels 14 - 69) = 470MHz - 806MHz (UHF)

Amateur radio frequencies

Band	Frequency range
160 m	1.8 to 2.0 MHz
80 m	3.5 to 4.0 MHz
60 m	5.3 to 5.4 MHz
40 m	7 to 7.3 MHz
30 m	10.1 to 10.15 MHz
20 m	14 to 14.35 MHz
15 m	21 to 21.45 MHz
12 m	24.89 to 24.99 MHz
10 m	28.0 to 29.7 MHz
6 m	50 to 54 MHz
2 m	144 to 148 MHz
70 cm	430 to 440 MHz
23 cm	1240 to 1300 M

Band	Frequency range	Origin of name
<u>HF band</u>	3 to 30 MHz	High Frequency
<u>VHF band</u>	30 to 300 MHz	Very High Frequency
<u>UHF band</u>	300 to 1000 MHz	Ultra High Frequency Frequencies from 216 to 450 MHz were sometimes called P-band: P revious, since early <u>British Radar</u> used this band but later switched to higher frequencies.
<u>L band</u>	1 to 2 GHz	Long wave
<u>S band</u>	2 to 4 GHz	Short wave
<u>C band</u>	4 to 8 GHz	Compromise between S and X
<u>X band</u>	8 to 12 GHz	Used in <u>WW II</u> for <u>fire control</u> , X for cross (as in <u>crosshair</u>)
<u>K_u band</u>	12 to 18 GHz	K urz- u nder
<u>K band</u>	18 to 26 GHz	<u>German</u> K urz (short)
<u>K_a band</u>	26 to 40 GHz	K urz- a bove
<u>V band</u>	40 to 75 GHz	
<u>W band</u>	75 to 111 GHz	W follows V in the <u>alphabet</u>

[\[edit\]](#) EU, NATO, US ECM Frequency Designations

Band	Frequency range
A band	0 to 0.25 GHz
B band	0.25 to 0.5 GHz
C band	0.5 to 1.0 GHz
D band	1 to 2 GHz
E band	2 to 3 GHz
F band	3 to 4 GHz
G band	4 to 6 GHz
H band	6 to 8 GHz
I band	8 to 10 GHz
J band	10 to 20 GHz
K band	20 to 40 GHz
L band	40 to 60 GHz
M band	60 to 100 GHz