

Frequency Wavelength Light Energy

[UV-Visible Spectroscopy](#)  This link contains a calculator converting [frequency](#), [wavelength](#) and energy values. Also covered are:

Visible and Ultraviolet Spectroscopy 1. Background 2. The Electromagnetic Spectrum 3. UV-Visible Absorption [Spectra](#) 4. The Importance of Conjugation

Name	Wavelength	Frequency (Hz)	Photon Energy (eV)
Gamma ray	less than 0.01 nm	more than 10 EHZ	100 keV - 300+ GeV
X-Ray	0.01 to 10 nm	30 PHz - 30 EHZ	120 eV to 120 keV
Ultraviolet	10 nm - 400 nm	30 EHZ - 790 THz	3 eV to 124 eV
Visible	390 nm - 750 nm	790 THz - 405 THz	1.7 eV - 3.3 eV
Infrared	750 nm - 1 mm	405 THz - 300 GHz	1.24 meV - 1.7 eV
Microwave	1 mm - 1 meter	300 GHz - 300 MHz	1.24 meV - 1.24 ÅµeV
Radio	1 mm - km	300 GHz - 3 Hz	1.24 meV - 12.4 feV

See Also

[12.23 - Time orbit period](#) [12.24 - Time spin period](#) [9.32 - Time](#) [9.33 - Time Intervals](#) [Color Frequency](#)
[Light Time Wavelength](#)