

### S.I Units Unification C

António Saraiva – 2010-04-27

[ajps2@hotmail.com](mailto:ajps2@hotmail.com)

[www.wbabin.net/saraiva/saraiva305.pdf](http://www.wbabin.net/saraiva/saraiva305.pdf)

Everything is made only of distance (L) and speed (V).

Reference values:

Compton wavelength of the electron -  $x_e = 2.426310215 \times 10^{-12} m$

Local speed of rotation of the universe -  $c = 2.99792458 \times 10^8 m/s$

Time is a derived unit.

	L -1	L 0	L	L 2	L 3	L 4	L 5
V-1	Thermal resistance; Electric resistance	Resistivity	Time; Inverse frequency				
V 0	Ionizing radiation	1	Distance; Permittivity	Surface; Capacitance; Entropy; Boltzmann constant	Volume ; Inverse Gravitational constant		
V	Frequency; Vorticity	Speed; Magnetic field	Magnetic potential; Magnetic resistance; Circulation	Magnetic charge; Magnetic flux	True magnetic dipole moment; Inverse mass resistance		
V 2	Acceleration; Magnetic current density	Electric field; Inverse inductance; Mass voltage	Magnetic current; Electric voltage; Inverse permeability; Density; Electric displacement field	Electric flux	Electric charge	Mass; Electric dipole moment	
V 3		Electric current density; Potential vorticity	Magnetic field strength; Magnetization	Magnetic voltage; Electric current;	Magnetic pole Strength; Mass current	Momentum; False magnetic moment	Angular momentum; Planck constant
V 4			Pressure; Energy density	Temperature; Surface tension	Force	Energy; Torque	
V 5	Luminance	Spectral irradiance	Intensity; Irradiance		Power; Candela		