The international system of units (SI), "SI-units"

The SI units

Dimension name	Dimension symbol		Units Symbol
electric current	I	$[I] =$	**A (Ampere)**
luminous intensity	J	$[J] =$	**cd (candela)**
thermodynamic temperature	Θ	$[\Theta] =$	**K (Kelvin)**
mass	m	$[m] =$	**kg (kilogram)**
length	l	$[l] =$	**m (metre)**
amount of substance	N	$[N] =$	**mol (mole)**
time	t	$[t] =$	**s (second)**

Common units expressed as SI-units

Dimension name	Dimension symbol	Unit of the dimension			in SI units
Force	F	$[F] =$	$\mathrm{N\ (Newton)} =$		$\mathbf{kg \cdot \frac{m}{s^2}}$
Energy	E	$[E] =$	$\mathrm{J\ (Joule)} =$		$\mathbf{kg \cdot \frac{m^2}{s^2}}$
Work	W	$[W] =$	$\mathrm{J\ (Joule)} =$		$\mathbf{kg \cdot \frac{m^2}{s^2}}$
Pressure	p	$[p] =$	$\mathrm{Pa\ (Pascal)} =$	$\frac{\mathrm{N}}{\mathrm{m^2}} =$	$\mathbf{\frac{kg}{m \cdot s^2}}$
Impulse	$\vec{p} = m \cdot \vec{v}$	$[\vec{p}] =$		$\mathrm{N \cdot s} =$	$\mathbf{\frac{kg \cdot m^3}{s}}$
Frequency	f	$[f] =$			$\mathbf{\frac{1}{s}}$
Soecific heat capacity	C	$[C] =$		$\frac{\mathrm{J}}{\mathrm{mol \cdot kg}} =$	$\mathbf{\frac{m}{mol \cdot s^2}}$
Heat amount	Q	$[Q] =$		$\mathrm{J} =$	$\mathbf{kg \cdot \frac{m^2}{s^2}}$
Enthalpy	H	$[H] =$		$\mathrm{J} =$	$\mathbf{kg \cdot \frac{m^2}{s^2}}$

Entropy	S	$[S] =$		$\frac{\mathrm{J}}{\mathrm{K}} =$	$\mathbf{\frac{kg \cdot m^2}{K \cdot s^2}}$
Charge	Q	$[Q] =$	$\mathrm{C\ (Coulomb)} =$		$\mathbf{A \cdot s}$
Electric Field	E	$[E] =$		$\frac{\mathrm{V}}{\mathrm{m}} = \frac{\mathrm{N}}{\mathrm{C}} =$	$\mathbf{\frac{kg \cdot m}{A \cdot s^3}}$
Voltage	U	$[U] =$	$\mathrm{V(Volt)} =$	$\frac{\mathrm{W}}{\mathrm{A}} = \frac{\mathrm{J}}{\mathrm{C}} = \frac{\mathrm{N \cdot m}}{\mathrm{A \cdot s}} =$	$\mathbf{\frac{kg \cdot m^2}{A \cdot s^3}}$
Capacity	C	$[C] =$	$\mathrm{F\ (Farad)} =$	$\frac{\mathrm{C}}{\mathrm{V}} = \frac{\mathrm{s}}{\Omega} =$	$\mathbf{\frac{A^2 \cdot s^4}{kg \cdot m^2}}$
Current	I	$[I] =$	$\mathrm{A\ (Ampere)} =$		$\mathbf{A}$
Current density	J	$[J] =$			$\mathbf{\frac{A}{m^2}}$
Resistance	R	$[R] =$	$\Omega\ \mathrm{(Ohm)} =$	$\frac{\mathrm{V}}{\mathrm{A}} =$	$\mathbf{\frac{kg \cdot m^2}{A^2 \cdot s^3}}$
Magnetic Field	B	$[B] =$	$\mathrm{T\ (Tesla)} =$	$\frac{\mathrm{V \cdot s}}{\mathrm{m^2}} =$	$\mathbf{\frac{kg}{A \cdot s^2}}$
Magnetic Dipolemoment	$\vec{p}_m$	$[\vec{p}_m] =$			$\mathbf{A \cdot m^2}$
Magnetic flux	Φ_S	$[\Phi_S] =$	$\mathrm{Wb\ (Weber)} =$	$\mathrm{V \cdot s} =$	$\mathbf{\frac{kg \cdot m^2}{A \cdot s^2}}$
Inductance	L	$[L] =$	$\mathrm{H\ (Henry)} =$	$\frac{\mathrm{V \cdot s}}{\mathrm{A}} = \Omega \cdot \mathrm{s} =$	$\mathbf{\frac{kg \cdot m^2}{A^2 \cdot s^2}}$
Electrical Impedance	Z	$[Z] =$	$\Omega\ \mathrm{(Ohm)} =$	$\frac{\mathrm{V}}{\mathrm{A}} =$	$\mathbf{\frac{kg \cdot m^2}{A^2 \cdot s^3}}$
Power	P	$[P] =$	$\mathrm{W\ (Watt)} =$	$\frac{\mathrm{J}}{\mathrm{s}} = \mathrm{V \cdot A} =$	$\mathbf{kg \cdot \frac{m^2}{s^3}}$
Activity	A	$[A] =$	$\mathrm{Bq\ (Becquerel)} =$		$\mathbf{\frac{1}{s}}$
Exposure	J	$[J] =$		$\frac{\mathrm{C}}{\mathrm{kg}} =$	$\mathbf{\frac{A \cdot s}{kg}}$
Adsorbed dose	D H	$[D] =$ $[H] =$	$\mathrm{Gy\ (Gray)} =$ $\mathrm{S\ (Sievert)} =$	$\frac{\mathrm{J}}{\mathrm{kg}} =$	$\mathbf{\frac{m^2}{s^2}}$