

Unit of Measurement

QUANTITY	NAME	SYMBOL
acceleration	metre per second squared	m/s^2
angular acceleration	radian per second squared	rad/s^2
angular momentum	kilogram metre squared per second	$\text{kg}\cdot\text{m}^2/\text{s}$
angular velocity	radian per second	rad/s
area	square metre	m^2
cœfficient of linear expansion	1 per kelvin	K^{-1}
concentration (of amount of substance)	mole per cubic metre	mol/m^3
density	kilogram per cubic metre	kg/m^3
diffusion cœfficient	metre squared per second	m^2/s
electric current density	ampere per square metre	A/m^2
exposure rate (ionising radiation)	ampere per kilogram	A/kg
kinematic viscosity	metre squared per second	m^2/s
luminance	candela per square metre	cd/m^2
magnetic field strength	ampere per metre	A/m
magnetic moment	ampere metre squared	$\text{A}\cdot\text{m}^2$
mass flow rate	kilogram per second	kg/s
mass per unit area	kilogram per square metre	kg/m^2
mass per unit length	kilogram per metre	kg/m
molality	mole per kilogram	mol/kg
molar mass	kilogram per mole	kg/mol
molar volume	cubic metre per mole	m^3/mol
moment of inertia	kilogram metre squared	$\text{kg}\cdot\text{m}^2$
moment of momentum	kilogram metre squared per second	$\text{kg}\cdot\text{m}^2/\text{s}$
momentum	kilogram metre per second	$\text{kg}\cdot\text{m/s}$
radioactivity (disintergration rate)	1 per second	s^{-1}
rotational frequency	1 per second	s^{-1}
specific volume	cubic metre per kilogram	m^3/kg
speed	metre per second	m/s
velocity	metre per second	m/s
volume	cubic metre	m^3
wave number	1 per metre	m^{-1}

QUANTITY	NAME	SYMBOL	SI units and Additional units
absorbed dose	joule per kilogram	J/kg	$m^2 \cdot s^{-2}$
coefficient of heat transfer Kelvin	watt per meter squared Kelvin	W/m ² •K	$kg \cdot s^{-3} \cdot K^{-1}$
conductivity	siemens per meter	S/m	$m^{-3} \cdot kg^{-1} \cdot s^3 \cdot A^2$
dielectric polarization	coulomb per square meter	C/m ²	$m^{-2} \cdot s \cdot A$
displacement	coulomb per square meter	C/m ²	$m^{-2} \cdot s \cdot A$
dynamic viscosity	Pascal second	Pa•s	$m^{-1} \cdot kg \cdot s^{-1}$
electric charge density	coulomb per cubic meter	C/m ³	$m^{-3} \cdot s \cdot A$
electric dipole moment	coulomb meter	C•m	$m \cdot s \cdot A$
electric field strength	volt per meter	V / m	$m \cdot kg \cdot s^{-3} \cdot A^{-1}$
energy density	joule per cubic meter	J/m ³	$m^{-1} \cdot kg \cdot s^{-2}$
entropy	joule per Kelvin	J/K	$m^2 \cdot kg \cdot s^{-2} \cdot K^{-1}$
exposure (ionizing radiation)	coulomb per kilogram	C/kg	$kg^{-1} \cdot s \cdot A$
heat capacity	joule per Kelvin	J/K	$m^2 \cdot kg \cdot s^{-2} \cdot K^{-1}$
heat flux density	watt per square meter	W / m ²	$kg \cdot s^{-3}$
magnetic dipole moment	weber meter	Wb•m	$m^3 \cdot kg \cdot s^{-2} \cdot A^{-1}$
molar energy	joule per mole	J/mol	$m^2 \cdot kg \cdot s^{-2} \cdot mol^{-1}$
molar entropy	joule per mole Kelvin	J/mol•K	$m^2 \cdot kg \cdot s^{-2} \cdot K^{-1} \cdot mol^{-1}$
molar heat capacity	joule per mole Kelvin	J/mol•K	$m^2 \cdot kg \cdot s^{-2} \cdot K^{-1} \cdot mol^{-1}$
moment of force	newton meter	N•m	$m^2 \cdot kg \cdot s^{-1}$
permeability	Henry per meter	H/m	$m \cdot kg \cdot s^{-2} \cdot A^{-2}$
permittivity	farad per meter	F/m	$m^{-3} \cdot kg^{-1} \cdot s^4 \cdot A^2$
radiant intensity	watt per steradian	W / sr	$m^2 \cdot kg \cdot s^{-3} \cdot sr^{-1}$
reluctance	1 per henry	H ⁻¹	$m^{-2} \cdot kg^{-1} \cdot s^2 \cdot A^2$
resistivity	ohm metre	$\Omega \cdot m$	$m^3 \cdot kg \cdot s^{-3} \cdot A^{-2}$
specific energy	joule per kilogram	J/kg	$m^2 \cdot s^{-2}$
specific entropy	joule per kilogram Kelvin	J/kg•K	$m^2 \cdot s^{-2} \cdot K^{-1}$
specific heat capacity	joule per kilogram Kelvin	J/kg•K	$m^2 \cdot s^{-2} \cdot K^{-1}$
specific latent heat	joule per kilogram	J/kg	$m^2 \cdot s^{-2}$
surface charge density	coulomb per square meter	C/m ²	$m^{-2} \cdot s \cdot A$
surface tension	newton per meter	N/m	$kg \cdot s^{-2}$
thermal conductivity	watt per metre Kelvin	W / m•K	$m \cdot kg \cdot s^{-3} \cdot K^{-1}$
torque	newton meter	N•m	$m^2 \cdot kg \cdot s^{-2}$