

SI Base Units

Name	Symbol	Unit of
second	s	time
meter	m	length
kilogram	kg	mass
ampere	A	electric current
kelvin	K	thermodynamic temperature
mole	mol	amount of substance
candela	cd	luminous intensity

SI Derived Units

Name	Symbol	Unit of	Equivalent in Base Units	Other Equivalents
becquerel	Bq	activity referred to a radionuclide	1/s	—
coulomb	C	electric charge	A·s	$V \cdot F = J/V$
degree Celsius	°C	Celsius temperature	K	temperature in K – 273.15
farad	F	capacitance	$A^2 \cdot s^4 / kg \cdot m^2$	$C/V = A \cdot s/V$
gray	Gy	absorbed dose, kerma	m^2/s^2	J/kg
henry	H	inductance	$kg \cdot m^2 / A^2 \cdot s^2$	$Wb/A = V \cdot s/A$
hertz	Hz	frequency	1/s	—
joule	J	energy, work, amount of heat	$kg \cdot m^2 / s^2$	$N \cdot m = W \cdot s = Pa \cdot m^3$
katal	kat	catalytic activity	mol/s	—
lumen	lm	luminous flux	cd	$(4 \times \pi) \text{ cd} \cdot \text{sr} = \text{lx} \cdot \text{m}^2$
lux	lx	illuminance	cd/m^2	$(4 \times \pi) \text{ cd} \cdot \text{sr}/\text{m}^2 = \text{lm} / \text{m}^2$
newton	N	force	$kg \cdot m/s^2$	$J/m = W \cdot s/m = Pa \cdot m^2$
ohm	Ω	electric resistance	$kg \cdot m^2 / A^2 \cdot s^3$	$V/A = 1/S$
pascal	Pa	pressure, stress	$kg/m \cdot s^2$	$N/m^2 = J/m^3$
radian	rad	plane angle	1	$(0.5/\pi)$ of a circle ≈ 0.159154 of a circle $\approx 57.296^\circ \approx 3437.746'$
siemens	S	electric conductance	$A^2 \cdot s^3 / kg \cdot m^2$	$A/V = 1/\Omega$
sievert	Sv	dose equivalent	m^2/s^2	J/kg
steradian	sr	solid angle	1	$(0.25/\pi)$ of a sphere ≈ 0.079577 of a sphere
tesla	T	magnetic flux density	$kg/A \cdot s^2$	$Wb/m^2 = N/A \cdot m$
volt	V	electric potential difference	$kg \cdot m^2 / A \cdot s^3$	$W/A = J/C = Wb/s$
watt	W	power, radiant flux	$kg \cdot m^2 / s^3$	$J/s = V \cdot A = N \cdot m/s$
weber	Wb	magnetic flux	$kg \cdot m^2 / A \cdot s^2$	$V \cdot s = H \cdot A = T \cdot m^2 = J/A$

SI Prefixes

Name	Symbol	Number	Base 10	Short Scale	Long Scale
quetta	Q	1 000 000 000 000 000 000 000 000 000 000	10 ³⁰	<i>nonillion</i>	<i>quintillion</i>
ronna	R	1 000 000 000 000 000 000 000 000 000	10 ²⁷	<i>octillion</i>	<i>quadrilliard</i>
yotta	Y	1 000 000 000 000 000 000 000 000	10 ²⁴	<i>septillion</i>	<i>quadrillion</i>
zetta	Z	1 000 000 000 000 000 000 000	10 ²¹	<i>sextillion</i>	<i>trilliard</i>
exa	E	1 000 000 000 000 000 000	10 ¹⁸	<i>quintillion</i>	<i>trillion</i>
peta	P	1 000 000 000 000 000	10 ¹⁵	<i>quadrillion</i>	<i>billiard</i>
tera	T	1 000 000 000 000	10 ¹²	<i>trillion</i>	<i>billion</i>
giga	G	1 000 000 000	10 ⁹	<i>billion</i>	<i>milliard</i>
mega	M	1 000 000	10 ⁶	<i>million</i>	<i>million</i>
kilo	k	1 000	10 ³	<i>thousand</i>	<i>thousand</i>
		1	10 ⁰	<i>one</i>	<i>one</i>
milli	m	0.001	10 ⁻³	<i>thousandth</i>	<i>thousandth</i>
micro	μ	0.000 001	10 ⁻⁶	<i>millionth</i>	<i>millionth</i>
nano	n	0.000 000 001	10 ⁻⁹	<i>billionth</i>	<i>milliardth</i>
pico	p	0.000 000 000 001	10 ⁻¹²	<i>trillionth</i>	<i>billionth</i>
femto	f	0.000 000 000 000 001	10 ⁻¹⁵	<i>quadrillionth</i>	<i>billiardth</i>
atto	a	0.000 000 000 000 000 001	10 ⁻¹⁸	<i>quintillionth</i>	<i>trillionth</i>
zepto	z	0.000 000 000 000 000 000 001	10 ⁻²¹	<i>sextillionth</i>	<i>trilliardth</i>
yocto	y	0.000 000 000 000 000 000 000 001	10 ⁻²⁴	<i>septillionth</i>	<i>quadrillionth</i>
ronto	r	0.000 000 000 000 000 000 000 000 001	10 ⁻²⁷	<i>octillionth</i>	<i>quadrilliardth</i>
quecto	q	0.000 000 000 000 000 000 000 000 000 001	10 ⁻³⁰	<i>nonillionth</i>	<i>quintillionth</i>
SI prefixes which are not multiples or sub-multiples of 1 000					
hecto	h	100	10 ²	<i>hundred</i>	<i>hundred</i>
deca	da	10	10 ¹	<i>ten</i>	<i>ten</i>
		1	10 ⁰	<i>one</i>	<i>one</i>
deci	d	0.1	10 ⁻¹	<i>tenth</i>	<i>tenth</i>
centi	c	0.01	10 ⁻²	<i>hundredth</i>	<i>hundredth</i>

Non-SI units accepted for use with the SI

Name	Symbol	Unit of	Equivalent in SI Units	Other Equivalents
minute	min	time	60 s	1 / 1 440 d = 1 / 60 h
hour	h	time	3 600 s	1 / 24 d = 60 min
day	d	time	86 400 s	24 h = 1 440 min
degree of arc	°	plane angle, phase angle	(π / 180) rad	60' = 3 600" = 1 / 360 of a circle ≈ 0.017 453 293 rad
minute of arc	'	plane angle, phase angle	(π / 10 800) rad	1 / 60° = 60" = 1 / 21 600 of a circle ≈ 290.888 209 μrad
second of arc	"	plane angle, phase angle	(π / 648 000) rad	1 / 3 600° = 1 / 60' = 1 / 1 296 000 of a circle ≈ 4.848 137 μrad
liter	l, L	volume	0.001 m ³	1 000 000 mm ³ = 1 000 cm ³ = 10 cm × 10 cm × 10 cm
tonne	t	mass	1 000 kg	1 Mg = 1 000 000 g
hectare	ha	area	10 000 m ²	0.01 km ² = 100 m × 100 m
bel	B	logarithmic ratio quantities	1	0.5 × (ln 10) Np ≈ 1.151 292 Np
neper	Np	logarithmic ratio quantities	1	2 / (ln 10) B ≈ 0.868 588 B
electronvolt	eV	energy	160.217 663 4 × 10 ⁻²¹ J	≈ 160.218 zJ
dalton	Da	mass	≈ 1.660 539 04 × 10 ⁻²⁷ kg	≈ 1.660 539 yg
astronomical unit	au	length	149.597 870 7 × 10 ⁻⁹ m	149.597 870 7 Gm

The dalton used to be called unified atomic mass unit [u]. The astronomical unit used to have the symbol ua.

Other units

bit [bit], byte [B], week, month, year [a]