

# SI Units

## Fundamental Units

Four fundamental units are used to measure mass, length, time, and current. All other units are derived from these four. The table below shows these four units as defined in System International (SI) units.

Quantity	Unit	Abbreviation
mass	kilogram	kg
length	meter	m
time	second	s
current	ampere	A

## Derived Units

Quantity	Unit	Abbreviation	Base Units
force	newton	N	$\text{kgm/s}^2$
energy & work	joule	J	$\text{kgm}^2/\text{s}^2$
power	watt	W	$\text{kgm}^2/\text{s}^3$
pressure	pascal	Pa	$\text{kg}/(\text{ms}^2)$
frequency	hertz	Hz	1/s
electric charge	coulomb	C	As
electric potential	volt	V	$\text{kgm}^2/(\text{As}^3)$
electric resistance	ohm		$\text{kgm}^2/(\text{A}^2\text{s}^3)$
capacitance	farad	F	$\text{A}^2\text{s}^4/(\text{kgm}^2)$
magnetic field	tesla	T	$\text{kg}/(\text{As}^2)$
magnetic flux	weber	Wb	$\text{kgm}^2/(\text{As}^2)$
inductance	henry	H	$\text{kgm}^2/(\text{s}^2\text{A}^2)$