

66.9: Gaussian Units

Table 66.9.1: Gaussian base units.

Name	Symbol	Quantity
centimeter	cm	length
gram	g	mass
second	s	time
kelvin	K	temperature
mole	mol	amount of substance
candela	cd	luminous intensity

Table 66.9.2: Gaussian derived units.

Name	Symbol	Definition	Base Units	Quantity
radian	rad	m/m	-	plane angle
steradian	sr	m ² /m ²	-	solid angle
dyne	<i>dyn</i>	gcm s ⁻²	g cm s ⁻²	force
erg	<i>erg</i>	<i>dyn</i> cm	gcm ² s ⁻²	energy
statwatt	<i>statW</i>	erg/s	gcm ² s ⁻³	power
barye	<i>ba</i>	dyn/cm ²	g cm ⁻¹ s ⁻²	pressure
galileo	<i>Gal</i>	cm/s ²	cm s ⁻²	acceleration
poise	P	g/(cms)	gcm ⁻¹ s ⁻¹	dynamic viscosity
stokes	<i>St</i>	cm ² /s	cm ² s ⁻¹	kinematic viscosity
hertz	Hz	s ⁻¹	s ⁻¹	frequency
statcoulomb	<i>statC</i>	-	g ^{1/2} cm ^{3/2} s ⁻¹	electric charge
franklin	Fr	<i>statC</i>	g ^{1/2} cm ^{3/2} s ⁻¹	electric charge
statampere	<i>statA</i>	<i>statC</i> /s	g ^{1/2} cm ^{3/2} s ⁻²	electric current
statvolt	<i>statV</i>	erg/statC	g ^{1/2} cm ^{1/2} s ⁻¹	electric potential
statohm	stat Ω	<i>statV</i> / <i>statA</i>	scm ⁻¹	electrical resistance
statfarad	<i>statF</i>	<i>statC</i> / <i>statV</i>	cm	capacitance
maxwell	Mx	<i>statV</i> cm	g ^{1/2} cm ^{3/2} s ⁻¹	magnetic flux
gauss	<i>G</i>	Mx/cm ²	g ^{1/2} cm ^{-1/2} s ⁻¹	magnetic induction
oersted	<i>Oe</i>	<i>statAs</i> /cm ²	g ^{1/2} cm ^{-1/2} s ⁻¹	magnetic intensity
gilbert	Gb	<i>statA</i>	g ^{1/2} cm ^{3/2} s ⁻²	magnetomotive force
unit pole	<i>pole</i>	<i>dyn</i> / <i>Oe</i>	g ^{1/2} cm ^{3/2} s ⁻¹	magnetic pole strength
stathenry	<i>statH</i>	erg/ <i>statA</i> ²	s ² cm ⁻¹	induction
lumen	lm	cdsr	cdsr	luminous flux

Name	Symbol	Definition	Base Units	Quantity
phot	ph	lm/cm^2	cdsr cm^{-2}	illuminance
stilb	sb	cd/cm^2	cd cm^{-2}	luminance
lambert	Lb	$1/\pi \text{cd}/\text{cm}^2$	cd cm^{-2}	luminance
kayser	K	$1/\text{cm}$	cm^{-1}	wave number
becquerel	Bq	s^{-1}	s^{-1}	radioactivity
katal	kat	mol/s	mols^{-1}	catalytic activity

66.9: Gaussian Units is shared under a [CC BY-NC-SA 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/) license and was authored, remixed, and/or curated by LibreTexts.