

SI QUICK REFERENCE GUIDE:

International System of Units (SI)

*The Modernized Metric System**

UNITS

The International System of Units (SI) is based on seven fundamental (base) units:

Base Units		
<i>Quantity</i>	<i>Name</i>	<i>Symbol</i>
length	metre	m
mass	kilogram	kg
time	second	s
electric current	ampere	A
thermodynamic temperature	kelvin	K
amount of substance	mole	mol
luminous intensity	candela	cd

and a number of derived units which are combinations of base units and which may have special names and symbols:

Examples of Derived Units			
<i>Quantity</i>	<i>Expression</i>	<i>Name</i>	<i>Symbol</i>
acceleration			
angular	rad/s ²		
linear	m/s ²		
angle			
plane	dimensionless	radian	rad
solid	dimensionless	steradian	sr
area	m ²		
Celsius temperature	K	degree Celsius	°C
density			
heat flux	W/m ²		
mass	kg/m ³		
current	A/m ²		
energy, enthalpy			
work, heat	N·m	joule	J
specific	J/kg		
entropy			
heat capacity	J/K		
specific	J/(kg·K)		
flow, mass	kg/s		
flow, volume	m ³ /s		
force	kg·m/s ²	newton	N
frequency			
periodic	1/s	hertz	Hz
rotating	rev/s		
inductance	Wb/A	henry	H
magnetic flux	V·s	weber	Wb
mass flow	kg/s		
moment of a force	N·m		
potential, electric	W/A	volt	V
power, radiant flux	J/s	watt	W
pressure, stress	N/m ²	pascal	Pa
resistance, electric	V/A	ohm	Ω
thermal conductivity	W/(m·K)		
velocity			
angular	rad/s		
linear	m/s		
viscosity			
dynamic (absolute)(μ)	Pa·s		
kinematic (ν)	m ² /s		
volume	m ³		
volume, specific	m ³ /kg		

*For complete information see *IEEE/ASTM SI-10*.