

Units

K : Constant $\frac{N \cdot m^2}{C^2}$
Newton \rightarrow meter
 \uparrow Coulombs

E : Electric field $N/C = V/m$

ϕ : Electric flux Nm^2/C

V : Electric Potential J/C
 \uparrow Joule

C : Capacitance $\therefore \frac{F}{\text{Farad}} = C/V \leftarrow \text{volts}$

u : Energy density J/m^3
 \uparrow meter

I : Current $\frac{A}{\text{Ampere}} = C/s$
 \uparrow seconds

n : electrons density $\text{electrons}/m^3$

J : Current density A/m^2

Power (P): Watt = $\bar{\sigma} / s$

B :- Magnetic field \bar{T}
tesla

P :- Pitch \bar{m}
meter

Φ_B :- Magnetic flux weber = $\bar{T} \cdot m^2$
tesla

L: Inductance \bar{H} = $T \cdot m^2 / A$
henry