



E = electric field amplitude
 B = magnetic field amplitude (instantaneous values)
 c = speed of light ($3 \times 10^8 \text{ m/s}$)

μ_0 = magnetic permeability in a vacuum, $\mu_0 = 1.3 \times 10^{-6} \text{ N/A}^2$
 ϵ_0 = electric permeability in a vacuum, $\epsilon_0 = 8.9 \times 10^{-12} \text{ C}^2/\text{Nm}^2$

Maxwell's Equations: Differential forms

$$01. \nabla \cdot E = \frac{\rho}{\epsilon_0} \quad 02. \nabla \cdot B = 0 \quad 03. \nabla \times E = -\frac{\partial B}{\partial t} \quad 04. \nabla \times B = \mu_0 \left(J + \epsilon_0 \frac{\partial E}{\partial t} \right)$$