

1 Formulas

- **Signal to Noise Ratio** $SNR = 10\log_{10}\frac{P_s}{P_n}$
- **Shannon's Equation** $C = B_c\log_2(1 + SNR)$
- *atennasize* $= \frac{1}{4}wavelength$
- **Energy of Signals** $E = \int_{-\infty}^{\infty} |x(t)|^2 dt$
- **Parseval's Theorem** $\int_{-\infty}^{\infty} |x(t)|^2 dt = \frac{1}{2\pi} \int_{-\infty}^{\infty} |X(\omega)|^2 d\omega$
- **Coherent Demodulator** $m(t)\cos(\Delta\omega t + \theta_d)$

2 Concepts

3 Taolu