

$$\left[\frac{(93,3710/32094)}{(V_{LFinal}/U_{FFinal}) / (V_{Linicial}/U_{Finicial})} - 1 \right] - 1$$

FORMULARIO

$$t = m \left(\frac{D_{max} - 1}{2} \right) \quad c = 3 \times 10^8 \text{ [m/s]} \quad r_f = 8497 \text{ [km]} \quad P_r = \frac{P_t G_t G_r \lambda^2}{(4 \pi d)^2} \quad d = \sqrt{(2 \cdot r \cdot h)} \quad I_j = \log_2 \left(\frac{1}{P_j} \right) \text{ bits}$$

$$D_{max} - 1 = c \cdot t \quad C_i \oplus C_j = C_k \quad H = \sum_{j=1}^m P_j \cdot I_j = \sum_{j=1}^m P_j \cdot \log_2 \left(\frac{1}{P_j} \right) \text{ bits} \quad R = \frac{H}{T} \text{ bits/s}$$

$$P(e > R \text{ errores}) = 1 - \sum_{j=0}^R P(j \text{ errores}) \quad \eta = \frac{R}{C} \quad s(t) = \sum_{k=-\infty}^{\infty} \Pi \left(\frac{t - kT_s}{\tau} \right) \quad d < \frac{\sqrt{\frac{P_t G_t G_r \lambda^2}{S}}}{4 \pi}$$

$$M(x) = m_{k-1} x^{k-1} + \dots + m_1 x + m_0 \quad w(t) = A \cdot \cos(w_0 \cdot t + \phi_0)$$

$$P(j \text{ errores}) = (P_e)^j (1 - P_e)^{n-j} \cdot C_j$$

$$C_j = \frac{n!}{j!(n-j)!} = \binom{n}{j} \quad t = \frac{n-k}{2} \quad C = B \cdot \log_2 \left(1 + \frac{S}{N} \right)$$

$$\lambda = \frac{c}{f_c} \quad n = \sqrt{1 - \frac{81 \cdot N}{f^2}} \quad d^2 + r^2 = (r+h)^2 \quad d^2 = 2rh + h^2$$

0,999 - 1

$$M = 2^n \quad \left(\frac{S}{N} \right)_{dB} = 6.02n + \alpha$$

$$\left(\frac{S}{N} \right)_{salida} = M^2 \quad \eta_{max} = \log_2 \left(1 + \frac{S}{N} \right)$$

$$\lambda = \frac{c}{f_c} \quad d = \sqrt{(2 \cdot r \cdot h)}$$

$$\frac{A_j^2}{R_c/R_b} \quad \frac{A_c^2}{2R_c} \quad \frac{R_b}{R_c} \quad N = \frac{\delta^2 B}{3 f_s} = \frac{4 \pi^2 A^2 f_a^2 B}{3 f_s^3}$$

$$r_{\text{herracorregido}} = 8497 \times 10^3 \text{ m} \quad P_r = \frac{P_t G_t G_r \lambda^2}{(4 \pi d)^2}$$

$$B_i = 2 \Delta F + (1+r)R$$

$$B_i = \left(\frac{1+r}{l} \right) R \quad B = (1+r)R \quad P_i = \left(\frac{1}{2} \right)^k = 2^{-k} \quad C = B \cdot \log_2 \left(1 + \frac{S}{N} \right) \quad D = \frac{R}{l} \quad D = \frac{2B}{1+r}$$

$$\text{Mod}_{PCM} = \frac{A_{max} - A_{min}}{2 \cdot A_i} \cdot 100 = \frac{\max[m(t)] - \min[m(t)]}{2} \cdot 100$$

$$B_{PCM} \geq \frac{1}{2} R = \frac{1}{2} n \cdot f_s$$

0,705
0,7405

365 / Rango
1,57

4,3

13301 = 7136
152