

UNIK 4700
9700

12 Sep 2017

Test yourself, answer these questions

- Convert to dB, dBm: $P_r = P_t \cdot G_t \cdot G_r \cdot L_{free} \cdot Loss$
- What is the exact difference between permeability and permittivity?
- What is Relative permittivity? and Relative Permeability?
- Define Propagation constant

left over from 5Sep2017

$$\begin{aligned} dB & \curvearrowleft \\ dB_m & \curvearrowleft 30 \text{ dB} \end{aligned}$$

$$\begin{aligned} \gamma_w & \\ \gamma_{nw} & \curvearrowleft 1000 \end{aligned}$$

Handset: $\gamma_w \approx 3 \text{ dB} = 33 \text{ dB}_m$

$$\begin{aligned} \gamma_w &= \\ 10 \log \left(\frac{P}{\gamma_w} \right) & \\ 20 \log 1 & \\ 0 \text{ dB} & \end{aligned}$$

Near-far problem

