

www.FirstRanker.com

COMMUNICATION SYSTEM

iii, The maximum line of sight distance d_{vis} between the two antennas having height h_i and h_r above the earth, is given by

$$d_{vis} = \sqrt{2h_i R} + \sqrt{2h_r R}$$

4 Modulation index $m = \frac{A_e}{A_c}$ where A_e and A_c are the amplitudes of modulating signal and carrier wave respectively.

4 Power of amplitude modulation $P_t = P_c [1 + \frac{m^2}{2}]$

411. Maximum frequency can be received from ionosphere $f_m(f) = \sqrt{81N^2 - 3000}$

51. Maximum modulated frequency can be detected by diode detector $f_m(f) = \frac{1}{2744i}$

UOISSIUIPV MOSUOV