

**PERFORMANCE EVALUATION OF RADAR SIGNAL
TO NOISE RATIO (SNR)**

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ABSTRACT

Radar is an object-detection system that uses electromagnetic waves for detecting distant of both moving and fixed objects. There are several factors that affect the performance of the radar receiver such as signal reception, signal to noise ratio (SNR), receiver bandwidth and receiver sensitivity. This project concentrated on performance of Signal to Noise ratio against target detection range for different radar cross section (RCS) and peak power (P_t). All the analysis has been done using the MATLAB programming in order to design the program and simulate the radar equation of SNR. Theoretical and simulation results show that SNR will be affected by the strength of transmits power (peak power) and radar cross section.

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