

ABSTRACT

Radar taken from English language is Radio Detection and Ranging. Doppler radar itself is a combination of radar systems that use Doppler as a reaction to the emitted radiation signal, intended to find out data about the distance and speed of an object. The transmitted signal is a microwave which contains information on target detection results. The data received is a radiation signal (echo) from the detected object, described by a frequency shift after being reflected from an object that causes a phase shift of the signal and is obtained from the comparison of the received signal with the emitted signal in the form of distance, position, radio speed, and other characteristics. Short-range radar can provide information on objects that are located in blind spots and can provide information on objects that are blocked by fog or rain. In the automotive industry, short-range radar can be used as automatic braking in the event of a collision.

