

# Performance Verification on UWB Antennas for Breast Cancer Detection

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**Abstract.** Breast cancer is a common disease among women and death figure is continuing to increase. Early breast cancer detection is very important. Ultra wide-band (UWB) is the promising candidate for short communication applications. This paper presents the performance of different types of UWB antennas for breast cancer detection. Two types of antennas are used i.e: UWB pyramidal antenna and UWB horn antenna. These antennas are used to transmit and receive the UWB signal. The collected signals are fed into developed neural network module to measure the performance efficiency of each antenna. The average detection efficiency is 88.46% and 87.55% for UWB pyramidal antenna and UWB horn antenna respectively. These antennas can be used to detect breast cancer in the early stage and save precious lives.

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