

50. DESIGN OF DIFFERENT TEXTILE SUBSTRATE PATCH ANTENNA

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The application of wireless body area network has been increasing in various fields such as medical, sports, military, etc. Recently much work has been done to investigate the antennas used in Body Area Network(BAN). In this paper, examining the performance of the rectangular microstrip patch antenna operated at ISM band (2.4 GHz) having various textile substrates such as are wash cotton, curtain cotton, Polycotton and polyester have been done. This is simulated using the High Frequency Structure Simulator (HFSS) software. The feeding technique used is coaxial feeding and the return loss value has been examined. Also the size of the antenna is reduced by inserting short pins.

Index Terms — Antenna Design, Textile substrate, Short pin, WBAN.

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