

# Enhancement of Bandwidth and VSWR of a Double Notch E-Shaped Inset-Fed Patch Antenna

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**Abstract:** This paper presents the design and performance evaluation of Double Notch E-Shaped Inset Fed patch antenna for high frequency applications. In recent times microstrip patch antennas are gaining a lot of importance for an enhanced communication. In this paper a single notch E-shaped patch antenna and a double notch E-shaped patch antenna are compared in which double notch E-shaped patch antenna exhibits better performance characteristics like Bandwidth, Return loss and VSWR parameters. An Inset feed is used as a feeding technique for an efficient power transfer. RT Duroid is used as a substrate which has a dielectric constant of 2.2. CST 2015 electromagnetic tool has been used to get the simulated results. The results are presented at the end.

**Keywords:** CST microwave studio, Bandwidth, VSWR, Return loss, Inset feed, Microstrip patch antenna.