

A DUAL WIDEBAND STAIR SHAPE MICROSTRIP PATCH ANTENNA FOR C & X BAND

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ABSTRACT

This paper proposed a compact wideband microstrip patch antenna for C & X band applications to enhanced the bandwidth. The proposed antenna is designed for satellite communication and radar applications in C band (4 - 8 GHz) & X band (8 - 12 GHz). Simulation results shows that the proposed antenna covers a wide bandwidth of 6.59 GHz covering almost the entire C & X band frequency range. There is considerable reduction in overall size, improvement in bandwidth and gain using the proposed patch antenna with DGS. Overall dimensions of the proposed antenna are 32 mm × 32 mm.

KEYWORDS: C & X Band Micro Strip Patch Antenna, Radar, DGS