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APERTURE COUPLED SLOTTED PATCH ANTENNA FOR DUAL BAND CIRCULARLY POLARIZED RADIATION

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Abstract:

A novel slotted-patch antenna is proposed for dual-band circularly polarized radiation using an aperture coupled feed. The antenna consists of a C/U-shaped slotted-patch radiator with an aperture coupled feeding system. The C/U-shaped slot is embedded on the square patch for dual-band and dual-sense circularly polarized radiation. The measured - 10dB S11 bandwidths for the lower and higher bands are 15% and 3.5%, respectively. The overall antenna size is $0.458\lambda_0 \times 0.458\lambda_0 \times 0.095\lambda_0$ at 2.5 GHz.

Key words: Slotted patch, square patch, radiation