

## **Compact Ultra-Wideband Printed Monopole Antenna with Inverted L-Shaped Slots for Data Communication and RF Energy Harvesting**

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**Abstract :** A compact UWB planar antenna fed with a microstrip-line is proposed. The new design is composed of a rectangular patch with symmetric L-shaped slots and fed by 50  $\Omega$  microstrip transmission line and a reduced ground-plane which have a periodic slots with an overall size of 47 mm x 20 mm. It is intended to be used in wireless applications that cover the ultra-wideband (UWB) frequency band. A wider impedance bandwidth of around 116.5% (1.875

**Keywords :** UWB planar antenna, L-shaped slots, wireless applications, impedance band-width, radiation pattern, CST

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