

The presented work in this article concerns a new ultra-wideband antenna design with an octagonal configuration and reduced dimensions. Different prototypes have been simulated and implemented in the form of monopoles. These prototypes have shown an admissible agreement between simulations and measurements and ultra-wide bands running from 3.1 to 14 GHz for wireless applications. © 2012 Wiley Periodicals, Inc. *Microwave Opt Technol Lett* 54:692–697, 2012; View this article online at wileyonlinelibrary.com. DOI 10.1002/mop.26666