

Ultra Wide Band MIMO Antenna for Vehicular Communication

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Abstract: *Vehicle to Vehicle (V2V) communication is continually gaining importance for road safety and different applications. so as to style economical V2V systems, associate degree understanding of realistic V2V propagation channels is needed. The Intelligent installation (ITS) initiative was invoked by congress in 1991 to advance the control systems by fostering development of Advanced Traffic Management System (ATMS). Multiple antenna systems conjointly called Multiple Input Multiple Output (MIMO) is wide wanted technology for its outstanding contribution in increasing the data rate compared to the standard approach of Single Input Single Output (SISO) systems. MIMO systems offer the pliability of antenna choice, creating the method economical and fewer advanced. A multiple-input-multiple-output (MIMO) antenna with ultra-wideband (UWB) performance is bestowed within the existing paper. The reliable Ness of the antenna within the automotive surroundings is investigated, with housing effects taken into consideration. The housing effects show that the antenna performs systematically even within the presence of an outsized metal object. Within the planned paper a UWB MIMO antenna for automotive communications is intended and developed. Stubs square measure integrated into the UWB monopole antenna part to realize resonance at three.1 GHz and one0.6 GHz. The antenna is fictional and tested for diversity performance. The planned antenna are designed, analysed victimisation 3D magnetic force simulation tools. The designed antenna are fictional and characterised for conveyance communication.*

Keywords: Antenna, MIMO, Vehicular Communication, Diversity

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