

论文

基于室内办公环境的WSN信道衰落模型的分析

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摘要:

针对室内环境下无线传感器网络信道衰落的不确定性,提出一个基于室内环境的信道衰落模型。根据无线信道衰落模型的理论研究和无线传感器网络信道衰落测试系统在室、内外实验数据的分析,得到信道衰落模型的各个参数,确定无线传感器网络室内信道衰落模型。实验证明此衰落模型在实际网络的节点部署和节点定位中的作用优于其他无线信道衰落模型。

关键词: 无线传感器网络 信道衰落模型 接收信号强度 室内外测试

Research on the indoors channel fading model in WSN

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Abstract:

For the uncertainty of wireless sensor networks in an indoor physical environment, a model about channel fading was proposed. According to the theoretical approach in the wireless channel fading model and the analysis of the indoors and outdoors experimental data in the channel fading model coming from the testing system in wireless sensor networks, the various parameters of the channel fading model, were obtained and the indoor channel fading model in wireless sensor networks was confirmed. A practical experiment shows that this model is better than the rest of the wireless channel fading models in node location and deployment.

Keywords: wireless sensor networks channel fading model the received signal strength indication (RSSI) the indoor testing

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