论文

高动态GPS信号模拟器信号强度问题研究

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高动态GPS卫星信号模拟器可以根据载体的动态环境,精确产生载体收到的GPS卫星信号。GPS卫星信号模拟器有多种技术要求,其中,模拟器输出信号的强度是研制模拟器所必须解决的一项关键技术。该文通过对GPS信号解调解扩后信噪比分析,导出了模拟器模拟的GPS卫星信号的强度如何客观地反映真实情况。实验结果证明了所提方法的有效性。

关键词 GPS 高动态信号模拟器 信号控制

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Study on the Signal Intensity of High Dynamic GPS Signal Simulator

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Abstract

According to receiver's dynamic environment, high dynamic GPS signal simulator can precisely generate GPS signal that the receiver get. GPS signal simulator has many technology request, the intensity of the signal is a key technology in the high dynamic GPS receiver's research and development. After the GPS signal is demodulated, the Signal Noise Ratio(SNR) of the receiver is analyzed in this paper. On the basis of above, the paper also derives how the signal generated by GPS Signal Simulator reflects truly the GPS signal and outside noise. Experimentation result proves the effectiveness of the method mentioned above.

Key words GPS High dynamic signal simulator Signal controlling

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