

# **Simulation and evaluation of a satellite digital television system according to the DVB-S2 standard**

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**Abstract:** This topic focuses on simulating and evaluating the performance of the Digital Video Broadcasting - Satellite (DVB-S2) system. The practical context requires improving the quality of digital television services, especially in the context of satellite technology development. The objective of the topic is to build a theoretical and experimental model to evaluate the transmission performance of satellite TV signals according to the DVB-S2 standard. The research method combines mathematical theory and telecommunications engineering with the implementation of practical applications on test equipment. Through this, the topic aims to provide optimal solutions for digital satellite television systems, contributing to improving the quality of TV signal transmission services.

**Keywords:** Satellite digital television system, DVB-S2, Simulation and evaluation, Satellite technology, Application testing