## Synthesis of Hybrid Reflector Antenna for Terrestrial Satellite Communication System

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**Keywords:** antenna array; directional factor; gain computer model of radiator; hybrid antenna feed horn; reflector antenna; standing wave ratio; terrestrial satellite communication system.

**Abstract:** This article describes how to build a hybrid reflector antenna based on the feed in the form of a linear-phase equidistant array antenna for terrestrial satellite communication system. We describe important aspects of the synthesis of hybrid reflector antennas for terrestrial satellite communication systems, developed a computer model of such antenna systems, can significantly extend the bandwidth of the communication channel with the ability to balance the traffic load, depending on the communication channel and the formation of multi-beam patterns.