

PROJECT / Compact Lens-Based Mechanically Steered Ka-Band user Terminal Antenna

KALens



Main Objective:

The main objective of the project is to develop a compact low-profile lens-based mechanically steered Ka-band antenna for satellite mobile user terminals. It is intended as a single aperture antenna to operate simultaneously in the downlink and uplink bands with circular polarization, the scanning being achieved by in-plane lens translation over a fixed feed. The pros and cons of translating the feed with fixed lens will be also addressed. Besides the feed design, it requires the identification of an adequate lens type, its fabrication technology and its design.

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