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CIRCULARLY POLARIZED MICROSTRIP ANTENNA FOR GLOBAL NAVIGATION SATELLITE SYSTEM

Abstract

As technologies become easier to use and more cost effective their use can become almost ubiquitous. The use of Global Navigation Satellite Systems (GNSS) for deriving position, navigation and timing (PNT) data is such a case. More GNSS signals and codes will provide the user with more options and greater confidence in the positioning results. All GNSS are vulnerable to failure, disruption and interference, and much work has been done to assess the possible failure modes and their effects on services, and to develop strategies to detect failures and correct them. Global Navigation Satellite System receive antenna technologies are reviewed in this paper, and the design challenges of this exciting area of antenna design are discussed. Global Navigation Satellite Systems (GNSSs) faces major challenges due to multipath effect, interference, phase center stability and gain pattern. To solve these problems we have focused on circularly polarized rectangular microstrip antenna in this paper which is has wide applications in GPS/GLONASS/BEIDOU/GALILEO systems.