



## Application of Adaptive Signal Processing Techniques in GNSS Receiver

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Condition: New. Publisher/Verlag: VDM Verlag Dr. Müller | Signal Detection, Adaptive Filter, Multipath Mitigation, and Anti-jam Techniques | With the growing demand for positioning in many military and civilian applications, there is an increasing requirement to enhance the performance of Global Positioning Systems (GPS) receivers. Adaptive signal processing is an enabling technology that is capable of addressing problems related to signal blanking, detection, multipath and interference mitigation. In this book, an adaptive signal processing technique is utilized to account for the effect due to satellite signal discontinuity, multipath and interference. In air navigation, the rotation of aircraft results in discontinuous tracking of GPS signal. To solve this problem, a ring-type antenna array is used to prevent signal discontinuity and a hypothesis-test based detection scheme is developed so that the correct antenna combination can be formed to provide uninterrupted reception of GPS signals in the presence of blanking, noise, and interferences. The dissertation also analyzes the spatial-temporal adaptive processing (STAP) performance of various type antenna array configurations in interference environment. At last, a modified adaptive filter is utilized as solution for multipath mitigation. | Format: Paperback | Language/Sprache: english | 175 gr | 220x150x6 mm | 120 pp.

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