

New Book Received

GPS/GNSS Antennas. By B. Rama Rao, W. Kunysz, R. Fante and K. McDonald, Artech House, 2012; 420 Pages. Price £109.00, ISBN 978-1-59693-150-3

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The following paragraphs are reproduced from the website of the publisher [1].

This practical resource provides a current and comprehensive treatment of GPS/GNSS antennas, taking into account modernized systems and new and developing applications. The book presents a number of key applications, describing corresponding receiver architectures and antenna details. You find important discussions on antenna characteristics, including theory of operation, gain, bandwidth, polarization, phase center, mutual coupling effects, and integration with active components.

Moreover, you get expert guidance on the design of adaptive arrays and signal processing techniques used to mitigate interference such as jamming. Addressing critical GNSS antenna high precision requirements, this in-depth book explains the relationships between antenna gain, satellite visibility, geometric dilution of precision, and the carrier-to-noise density ratio. The book delineates requirements for both dual-band and tri-band antennas.

You get detailed coverage of a wide range of antenna designs, including microstrip patch, quadrafilar helix, axial mode helix, spiral, inverted L, and planar inverted F antennas. Moreover, you find a discussion on new magnetic “metamaterial” substrates and other dielectric substrate materials. Further, this comprehensive book presents designs for very compact GNSS antennas for personal handheld devices and automobiles.

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* *Editor's Note:* The brief summary and the contents of the books are reported as provided by the author or the publishers. Authors and publishers are encouraged to send review copies of their recent books of potential interest to readers of *Remote Sensing* to the Publisher (Dr. Shu-Kun Lin, Multidisciplinary Digital Publishing Institute (MDPI), Kandererstrasse 25, CH-4057 Basel, Switzerland. Tel.: +41-61-683-77-34; Fax: +41-61-302-89-18, E-Mail: lin@mdpi.com). Some books will be offered to the scholarly community for the purpose of preparing full-length reviews.

Note

1. The website for this book is:

<http://www.artechhouse.com/International/Books/GPSGNSS-Antennas-1239.aspx>

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