Record Nr. UNINA9910455456003321 Autore Otoshi Tom Y. Titolo Noise temperature theory and applications for deep space communications antenna systems / / Tom Y. Otoshi Pubbl/distr/stampa Boston:,: Artech House,, ©2008 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2008] **ISBN** 1-59693-378-X Descrizione fisica 1 online resource (308 p.) Artech House antennas and propagation series Collana Disciplina 621.382/4 Soggetti Deep Space Network Microwave antennas Microwave communication systems Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Introductory topics -- Reflector surfaces -- Noise temperature experiments -- Mismatch error analyses -- Network analysis topics --Useful formulas for noise temperature applications. "Deep space communications technology is bringing home benefits to Sommario/riassunto all types of microwave communications systems. This groundbreaking resource explains the breakthroughs that the NASA JPL Deep Space Antenna Network achieved in reducing noise and signal interference. The book focuses on ground-based receivers and how they can be improved to pick up weak or disrupted signals. Practicing microwave engineers in all fields can apply these theories and methods to improve systems performance. In particular, engineers working on deep-space antenna systems can make the most of the techniques for analyzing errors caused by noise temperature. The book explains how to confidently predict receiver noise temperature thereby boosting the capability to receive data. Tutorials, practical formulas, and powerful

antenna engineer's desk."--

techniques earn this book a permanent place on every microwave and