Record Nr. UNINA9910821483103321 Autore Barton David Knox <1927-> Titolo Radar equations for modern radar / / David K. Barton Pubbl/distr/stampa Boston:,: Artech House,, [2013] [Piscatagay, New Jersey]:,: IEEE Xplore,, [2012] **ISBN** 1-5231-1753-2 1-60807-522-2 Descrizione fisica 1 online resource (448 p.) Collana Artech House radar library 448 Disciplina Soggetti Radar Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Development of the radar equation -- The search radar equation --Radar equations for clutter and jamming -- Detection theory --Beamshape loss -- System noise temperature -- Atmospheric effects -- The pattern-propagation factor -- Clutter and signal processing --Loss factors in the radar equation. Based on the classic, "Radar Range-Performance Analysis from 1980," Sommario/riassunto this practical volume extends that work to ensure applicability of radar equations to the design and analysis of modern radars. This book helps you identify what information on the radar and its environment is needed to predict detection range. Moreover, it provides equations and data to improve the accuracy of range calculations. You find detailed information on propagation effects, methods of range calculation in environments that include clutter, jamming and thermal noise, as well as loss factors that reduce radar performance. This book is supported

with nearly 200 illustrations and over 430 equations. --