Record Nr. UNINA9910829970903321 Autore Kroupa Venceslav F. <1923-> Titolo Frequency stability: introduction and applications / / Venceslav F. Kroupa Pubbl/distr/stampa Piscataway, New Jersey:,: IEEE Press,, c2012 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2012] **ISBN** 1-118-31011-X 1-283-94129-5 1-118-31010-1 Descrizione fisica 1 online resource (332 p.) Collana IEEE series on digital & mobile communication;; 34 IEEE Press series on digital and mobile communication; ; 15 Classificazione TEC008060 Disciplina 621.381/323 621.381323 621.384 Soggetti Oscillators, Electric - Design and construction Frequency stability Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Noise and Frequency Stability -- Noise in Resonators and Oscillators --Noise Properties of Practical Oscillators -- Noise of Building Elements -- Time Domain Measurements -- Phase-Locked Loops. Sommario/riassunto "For wireless communication engineers, it is important to have solid fundamental knowledge of noise and how to minimize it by stabilizing the incoming/outgoing waves. This introductory text of frequency stability offers discussion of the noise from the practical and theoretical points of view, proceeding with investigation of frequency and time fluctuations in resonators, and continue with stability of both of standard and practical microwave oscillators. Finally, the author discusses noise properties of building circuit blocks introducing a chapter on time domain properties and their relations with noise spectral densities. A special chapter is dedicated to the design and properties of the Phase Locked Loops. They are very important for frequency synthesizers which influence every day communications of millions and millions of people"--