1. Record Nr. UNINA9910366588403321 Autore Alencar Marcelo S **Titolo** Communication Systems / / by Marcelo S. Alencar, Valdemar C. da Rocha Jr Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-25462-3 Edizione [2nd ed. 2020.] 1 online resource (XIX, 401 p. 197 illus., 1 illus. in color.) Descrizione fisica Disciplina 621.3822 621.382 Soggetti Electrical engineering Computer communication systems Signal processing Image processing Speech processing systems Communications Engineering, Networks Computer Communication Networks Signal, Image and Speech Processing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Signal Analysis -- Probability Theory and Random Nota di contenuto Processes -- Speech Coding -- Amplitude Modulation -- Quadrature Amplitude Modulation -- Angle Modulation -- Propagation Channels -- Carrier Transmission -- Mobile Cellular Telephony -- Conclusion. Sommario/riassunto This revised textbook fully updates its comprehensive coverage of Fourier transform, convolution, and definitions of autocorrelation and power spectral density. The new edition reflects the emergence of a variety of new services and systems. It continues to cover the concepts of probability, random variables, and stochastic processes in full, but brings them up to speed for the modern context. The book now features a new appendix on LTE, fully revamped of figures and tables, new information on AM-VSB Modulation, new examples related to new digital television standards, and a thoroughly revamped chapter on

Mobile Cellular Telephony. All major topics including channel modeling,

channel characteristics, and propagation are still covered, with an emphasis on simple models. Many updated examples are provided as well as problems at the end of each chapter to allow the reader to practice the acquired knowledge. Fully updated coverage on analog and digital concepts for communication system · Includes new information on AM-VSB modulation, multipath effects, and standards · Features revamped chapter problems for self-testing and exploration in addition to a full suite of classroom material.