

1. Record Nr.	UNINA9910458167503321
Autore	Blahut Richard E.
Titolo	Modem theory : an introduction to telecommunications / / Richard E. Blahut [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2010
ISBN	1-107-20948-X 1-282-65282-6 9786612652820 0-511-81140-3 0-511-68782-6 0-511-69007-X 0-511-69267-6 0-511-69155-6 0-511-69081-9 0-511-68933-0
Descrizione fisica	1 online resource (xiv, 497 pages) : digital, PDF file(s)
Disciplina	621.39/814
Soggetti	Coding theory Signal processing - Digital techniques - Mathematics Modulation (Electronics) - Mathematics Modems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. [479]-487) and index.
Nota di contenuto	Baseband Modulation -- Baseband Demodulation -- Sequences at Baseband -- Passband Modulation -- Passband Demodulation -- Principles of Optimal Demodulation -- Synchronization -- Codes for Digital Modulation -- Codes for Data Transmission -- Performance of Practical Demodulators -- Secure Communications.
Sommario/riassunto	At the heart of any modern communication system is the modem, connecting the data source to the communication channel. This first course in the mathematical theory of modem design introduces the theory of digital modulation and coding that underpins the design of digital telecommunications systems. A detailed treatment of core

subjects is provided, including baseband and passband modulation and demodulation, equalization, and sequence estimation. The modulation waveforms for communication channels and digital recording channels are treated in a common setting and with unified terminology. A variety of more advanced topics is also covered, such as trellis codes, turbo codes, the Viterbi algorithm, block codes, maximum likelihood and maximum posterior probability, iterative demodulation, and jamming. Numerous end-of-chapter exercises are also included to test the reader's understanding throughout. This insightful book is ideal for senior undergraduate students studying digital communications and is also a useful reference for practising engineers.
