

1. Record Nr.	UNINA9910778299703321
Autore	Abate Zerihun
Titolo	WiMax RF systems engineering // Zerihun Abate
Pubbl/distr/stampa	Boston : , : Artech House, , ©2009 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2009]
ISBN	1-59693-976-1
Descrizione fisica	1 online resource (340 p.)
Collana	Artech House mobile communications series
Disciplina	621.382 621.39/81
Soggetti	Broadband communication systems Mobile communication systems Wireless communication systems
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	WiMAX RF Systems Engineering; Contents; Preface; Part I Introduction; Chapter 1 Introduction; Chapter 2 OFDM Flavors, ISI, Doppler, Rayleigh, and Fading; Part II Technical Background; Chapter 3 Modulation; Chapter 4 RF Propagations, Measurements, and Models; Chapter 5 Communication Channel Characterization; Part III WiMAX Radio Design; Chapter 6 Network Planning Fundamentals; Chapter 7 Point-to-Point Link Design; Chapter 8 Link, Design, Oversubscription, and Delay; Chapter 9 WiMAX Capacity, Frequency Planning, and MIMO Antennas; Chapter 10 Case Study Chapter 11 Preliminary Design to Benchmarking Part IV Network and Security; Chapter 12 Fundamentals of WiMAX Network; Chapter 13 WiMAX Security; Part V Comparable Systems; Chapter 14 WiFi Radio Planning; Chapter 15 UMTS and WiMAX Comparison; Chapter 16 Competing with and Complementing WiMAX; Appendix A Erlang B; Appendix B Erlang C; Appendix C Error Functions; Appendix D Mathematical Formula; D.1 Basic RF Design Formulas; Acronyms; About the Author; Index
Sommario/riassunto	Already deployed in over 42 countries, WiMAX is quickly becoming one of the most important technologies for IP-based high-speed communications. This practical book delivers a solid understanding of

WiMAX technology and RF network planning and deployment techniques without undue mathematical rigors. You find numerous examples and real-world case studies that illustrate the evolution of the design process. The book provides hands-on details on essential considerations and important aspects of the technology, from link budget, communication channel characterization, and capacity, to frequency planning, channel impairments and point-to-point link design. You also find in-depth discussions on WiMAX security and how WiMAX complements other technologies.
