

1. Record Nr.	UNINA9910807813603321
Autore	Delorme Bruno (Engineer)
Titolo	Antennas and site engineering for mobile radio networks // Bruno Delorme
Pubbl/distr/stampa	Boston : , : Artech House, , [2013] [Piscataqay, New Jersey] : , : IEEE Xplore, , [2013]
ISBN	1-5231-1696-X 1-60807-704-7
Descrizione fisica	1 online resource (301 p.)
Collana	Mobile communications series
Disciplina	621.384135
Soggetti	Radio - Antennas Radio - Antennas - Design and construction
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 at the end of each chapters and index.
Nota di contenuto	Antennas and Site Engineering for Mobile Radio Networks; Contents; Foreword; Preface; Conventions; Part I: Antennas in Mobile Radio Networks; 1 Fundamentals of Antennas; 1.1 Antenna History; 1.1.1 Maxwell Theory and Hertz Radiating System; 1.1.2 Antenna Discovery; 1.2 How an Antenna Radiates; 1.3 Vertical Half-Wave Dipole Radiation Through Maxwell Equations; 1.3.1 Electromagnetic Wave Velocity; 1.3.2 Relationship between the Electric Field and the Magnetic Field; 1.3.3 Electric and Magnetic Power of the Electromagnetic Wave: Poynting Vector. 1.4 Wave Surface, Spherical Wave, Plane Wave, and Wave Polarization 1.4.1 Wave Surface; 1.4.2 Spherical Wave; 1.4.3 Plane Wave; 1.4.4 Wave Polarization; 1.5 Electric Field Power Loss between an Antenna Transmitter and an Antenna Receiver in Free Space; 1.6 Antenna Parameters; 1.6.1 Antenna Polarization; 1.6.2 Antenna Radiation Patterns; 1.6.3 Antenna Gain; 1.6.4 Aperture Angle; 1.6.5 Bandwidth.
Sommario/riassunto	Published in 2012 exclusively in France, this English translation of Antennas and Site Engineering for Mobile Radio Networks is the first book to discuss the specific antennas used in both commercial (2G, 3G, 4G) and private mobile radio (PMR) networks. These are the antennas located on pylons in rural areas and tubular masts on rooftops in urban

areas. This book presents essential information for engineers, managers, and technicians working for mobile phone equipment manufacturers, network integrators, and antenna installation companies. This resource is divided into three sections: the first
