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	Autore	Van Diggelen Frank Stephen Tromp
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	Descrizione fisica	1 online resource (399 p.)
	Collana	GNSS technology and applications series
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	Soggetti	Global Positioning System
		GPS receivers
		Navigation - Technological innovations
	Lingua di pubblicazione	Inglese
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	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Introduction -- Standard GPS review -- Assistance, the "A" in A-GPS -- Coarse-time navigation: instant GPS -- Coarse-time dilution of precision -- High sensitivity: indoor GPS -- Generating assistance data -- Ephemeris extension, long-term orbits -- Industry standards and government mandates -- Future A-GNSS.
	Sommario/riassunto	Today, increasing demands and expectations are being placed on GPS systems. Assisted GPS (A-GPS) has been developed to provide greatly improved capabilities, helping GPS work better and faster in almost any location. Offering a detailed look at all the technical aspects and underpinnings of A-GPS, this unique book places emphasis on practical implementation. The book reviews standard GPS design, helping you understand why GPS requires assistance in the first place. You discover how A-GPS enables the computing of a position from navigation satellites in the absence of precise time - a topic not covered in any other book. Moreover, you learn how to design and analyze a high sensitivity GPS receiver and determine the achievable sensitivity of a GPS receiver. The book provides detailed worksheets that show how to compute, analyze, and improve the processing gain from the signal strength at the antenna to the carrier-to-noise ratio (C/N0) at the front end, to the signal-to-noise ratio (SNR) after the correlators. This cutting-edge volume discusses special forms of assistance data,

industry standards for A-GPS, and government mandates for location of mobile phones. You also find coverage of future global navigation satellite systems and how they can be designed specifically for instant-fixes and high sensitivity. The book features numerous tables, worksheets, and graphs that illustrate key topics and provide the equivalent of a technical handbook for engineers who design or use A-GPS.