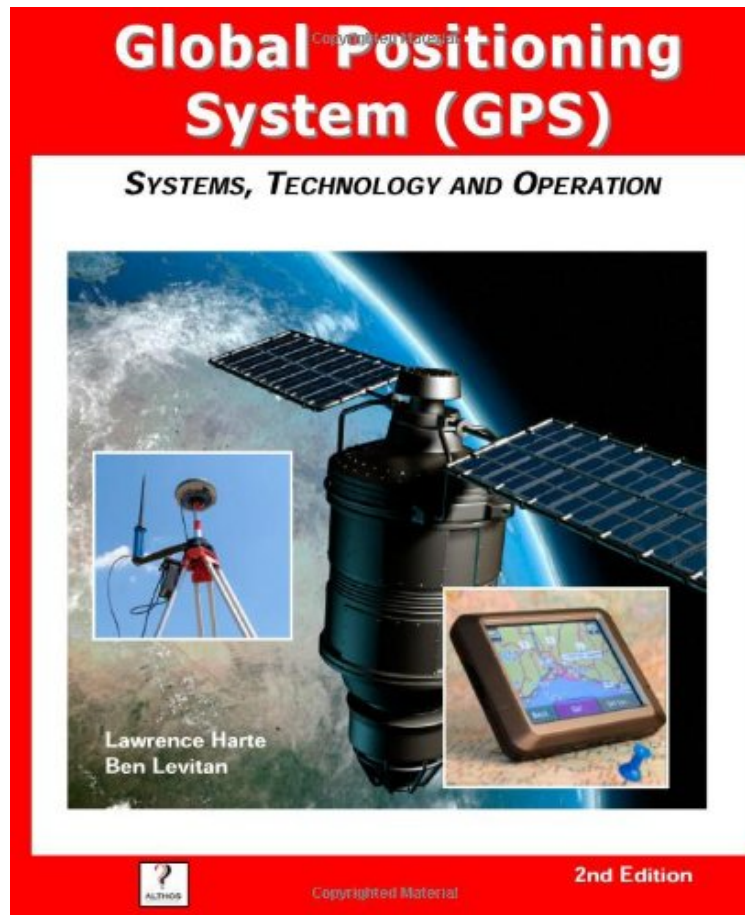


GPS Quick Course 2nd Edition, Systems, Technology and Operation

Ben Levitan, Lawrence Harte

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#3043072 in Books 2009-11-05 Original language: English PDF # 1 9.25 x .23 x 7.52l, .45 #File Name: 1932813306110 pages | File size: 38.Mb

Ben Levitan, Lawrence Harte : GPS Quick Course 2nd Edition, Systems, Technology and Operation before purchasing it in order to gauge whether or not it would be worth my time, and all praised GPS Quick Course 2nd Edition, Systems, Technology and Operation:

1 of 1 people found the following review helpful. Very cool - SensibleBy Ben C. Levitan Well constructed. Starts off with the simple explanations and by the end of the book you can do the calculations for GPS. It saved my butt!

This book covers satellite position location technology and the GPS system has evolved. You will learn the functional parts of GPS systems, how they work and work together to provide position measurements that are accurate to within centimeters. The operation of GPS is described including satellite acquisition, signal reception and pseudo-ranging. Discover how time reference and error correction data is used and why it is very important to provide precise satellite positioning. Global Positioning System is a navigation system that uses satellites to act as reference points for the calculation of position location. You will learn how GPS devices can use other systems or devices to provide location

services when there is a temporary loss of a satellite links. Explained are the multiple types of civilian and military codes used in the GPS system and how they provide different levels of accuracy and reliability. GPS radio technology is described including the frequencies GPS uses, modulation and power levels. You will learn about the many applications that use GPS technology including mapping, location monitoring, agriculture control, navigation, navigation warfare (NAVWAR), surveying and structural deformation monitoring. Learn how GPS is used in combination with other position detection systems such as laser ranging to provide 3 dimensional charts and maps. The sources of GPS errors are explained such as orbital position errors and variation in radio propagation. You will learn ways to minimize the errors. such as receiver initialization, RTK and differential GPS (D-GPS). A brief description of the interface and data format standards is provided.

About the Author Ben Levitan (Raleigh, NC) was Manager of Technical Standards for TSI Telecommunication Services (formerly part of Verizon and GTE). For the last 14 years, he has been professionally active in global standards development, and has authored some of the standards himself. Ben makes frequent appearances at conferences and shows. In addition, he teaches GSM courses for IIR, an information technology training and research giant, with 46 companies worldwide. LAWRENCE HARTE is the president of APDG, a provider of expert information to the telecommunications market. Mr. Harte has over 23 years of experience in the electronics industry, including company leadership, product management, development, marketing, design, and testing of telecommunications (cellular), radar, and microwave systems. He has been issued patents relating to cellular technology. He has authored over 75 articles on related subjects and has been a speaker and panel moderator at industry trade events. Mr. Harte earned an executive MBA at Wake Forest University and received his B.A. from the University of the State of New York. During the TDMA digital cellular standard development process, Mr. Harte served as an editor and voting company representative for the Telecommunications Industries Association (TIA) TR45.3., digital cellular standards committee. As of 2001, Mr. Harte has authored and co-authored over 20 books relating to telecommunications technology. He has served as a consultant and expert witness for leading companies including Ericsson, Siemens, VLSI, AMD, Casio, Samsung, Sony, ATT, Nokia, Hughes, and many others. RICHARD LEVINE is the founder and principal engineer of Beta Scientific Laboratory and is also Adjunct Professor of Electrical Engineering at Southern Methodist University. He is active as a technology consultant to many firms developing new cellular and PCS systems and products used in Brazil, Canada, England, France, Germany, Israel, Korea, Mexico, and the United States. Mr. Levine is a well-known teacher of cellular and PCS technology to people in the industry. He was formerly the chairman of several working groups in the North American digital cellular standards development. Mr. Levine earned the Bachelor, Master, and Doctor of Science degrees from M.I.T., is licensed as a Professional Engineer, and has earned both amateur and professional radio operator licenses. He has been issued several patents on telecommunications, computer systems, and related technologies. ROMAN KITKA is the Director, Strategy and Business Creation, Nokia Ventures Organization. He is a seasoned wireless communications industry veteran, innovator, and visionary. During his 17 + years in wireless communications, he has held product planning and development, marketing, and market/business development positions with leading wireless manufacturers including Nokia Mobile Phones, Panasonic, GoldStar, and OKI Telecom. Mr. Kitka has influenced several cellular mobile, transportable, and portable phone model designs, features, and functionality. His efforts have resulted in the first cellular payphone, first cellular PBX adjunct "Business Link," voice recognition dialers, as well as the first PCS product launch in the U.S. Mr. Kitka possesses exceptional foresight and understanding of global market needs, both from anthropological and psychological aspects, as well as the opportunities provided by existing and future wireless communications, Internet and related technologies, and business. Mr. Kitka, a graduate of Rutgers University in New Jersey, is a co-author of the books CDMA IS-95 FOR CELLULAR AND PCS: Technology, Economics Services; DELIVERING xDSL; 3G CELLULAR AND PCS DEMYSTIFIED; and WAP DEMYSTIFIED. Mr. Kitka has been a speaker at several wireless communications and Internet conferences and events, both in the U.S. and internationally.