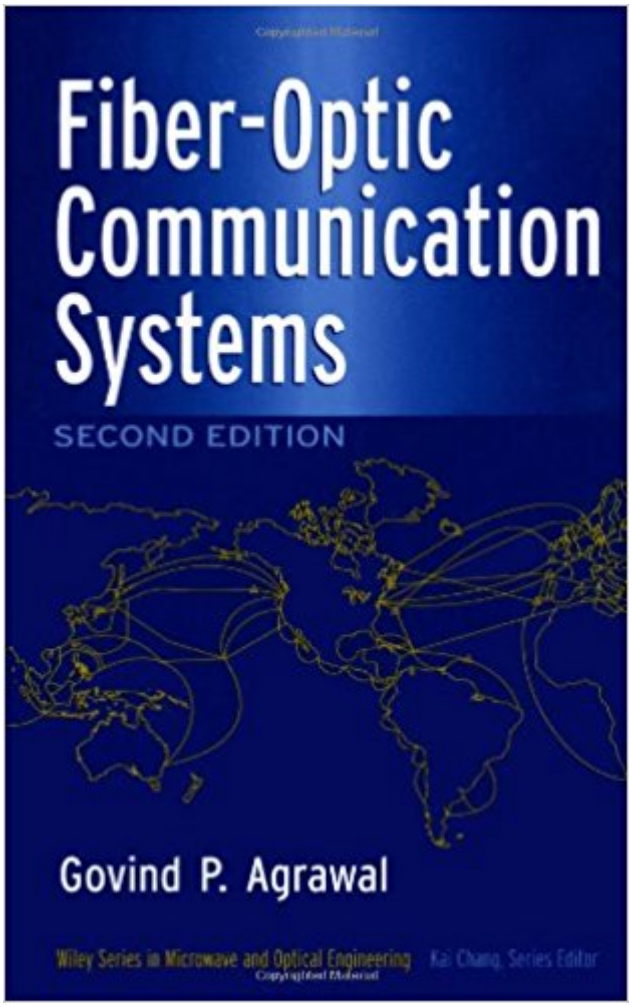
Fiber-Optic Communication Systems (Wiley Series In Microwave And Optical Engineering)



Synopsis

A complete, up-to-date review of fiber-optic communication systems theory and practice Fiber-optic communication systems technology continues to evolve rapidly. In the last five years alone, the bit rate of commercial point-to-point links has grown from 2.5 Gb/s to 40 Gb/s-and that figure is expected to more than double over the next two years! Such astonishing progress can be both inspiring and frustrating for professionals who need to stay abreast of important new developments in the field. Now Fiber-Optic Communication Systems, Second Edition makes that job a little easier. Based on its author's exhaustive review of the past five years of published research in the field, this Second Edition, like its popular predecessor, provides an in-depth look at the state of the art in fiber-optic communication systems. While engineering aspects are discussed, the emphasis is on a physical understanding of this complex technology, from its basic concepts to the latest innovations. Thoroughly updated and expanded, Fiber-Optic Communication Systems, Second Edition: * Includes 30% more information, including four new chapters focusing on the latest lightwave systems R&D * Covers fundamental aspects of lightwave systems as well as a wide range of practical applications * Functions as both a graduate-level text and a professional reference * Features extensive references and chapter-end problem sets.

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Customer Reviews

"The first edition of this book is well known all over the world and had a great echo anywhere....

Because of...rapid advances it was necessary to bring out the second edition in order to continue to provide a comprehensive and up-to-date account of fiber-optic communication systems." (Optik: International Journal for Light and Electron Optics, Vol. 111, No. 12, 2000) "...an excellent introduction...this is undoubtedly one of the best, most comprehensive and technologically advanced textbooks available..." "...I feel this a must for a researcher in the field of fiber-optic communications" (Glass Technology, December 2000)

A complete, up-to-date review of fiber-optic communication systems theory and practice Fiber-optic communication systems technology continues to evolve rapidly. In the last five years alone, the bit rate of commercial point-to-point links has grown from 2.5 Gb/s to 40 Gb/s-and that figure is expected to more than double over the next two years! Such astonishing progress can be both inspiring and frustrating for professionals who need to stay abreast of important new developments in the field. Now Fiber-Optic Communication Systems, Second Edition makes that job a little easier. Based on its author's exhaustive review of the past five years of published research in the field, this Second Edition, like its popular predecessor, provides an in-depth look at the state of the art in fiber-optic communication systems. While engineering aspects are discussed, the emphasis is on a physical understanding of this complex technology, from its basic concepts to the latest innovations. Thoroughly updated and expanded, Fiber-Optic Communication Systems, Second Edition: * Includes 30% more information, including four new chapters focusing on the latest lightwave systems R&D * Covers fundamental aspects of lightwave systems as well as a wide range of practical applications * Functions as both a graduate-level text and a professional reference * Features extensive references and chapter-end problem sets.

it is in a quite good form as it was described in the main description of book. the delivery time is as i have expected.very good job.. thanks a lot..

I read this book studying one of the courses during my Ph.D. and it definitely belongs to my bookshelf. My only complain was that while the basic theory and concepts are given well, the very recent developments are hardly systematized, notably in the chapter on optical networks. I am not sure however if this could be done better. The book also contains a number of errors.

This is GREAT book for people who have at least the basic optics and electrical engineering concepts, even if they dont have technical degrees, and who feel comfortable with the mathematical

treatment of a subject, even when they dont understand every little detail. Actually about a third of the book can be understood easily by anyone interested in the subject, but if you cannot "read" mathematics and have never seen logarithms or partial derivatives before, then I recommend "Understanding Fiber Optics" by Hecht or a similar non-mathematical treatment of the subject.Overall the book follows a very logical pattern in its treatment of the subject. It is an overview-style book, covering the different parts of a fiber-optic communications system individually, and then tying them together (which I thought was the most useful feature of the book). Even though it covers many practial issues, it tends to read more like a physics/optics textbook than an engineering textbook or a lab manual.In summary if you have the basic optics/e.e. knowledge and are comfortable thinking mathematically, this is a great overview book for you, but if are a first time reader trying to learn about fiber optics, stay away from this book or use it as a second, 'reference' book only.

If you read past the first few chapters you will discover that Agrawal provides you with a generous easy to understand explanation of the various aspects of the technology while simultaneously treating the most elevated aspects using advanced mathematical formulae. He has crafted an excursion through the technology that has something for all levels of expertise. Note that some patience and a second reading could be useful. However if you are in or around the business of communicating via fiber, this belongs on your bookshelf and you owe yourself at least two readings. It is that good. Hint: If you do not possess at least a Bachelors Degree in solid state physics, start reading at chapter 5.

To the 2 folks who gave the book a 1 star. It is not a book for people who are new to the industry, people with little mathematical background, or for beginners. The book is more or less straight forward for people who come from physics or optics backgrounds and have had at least 1 year of graduate school. In fact, there are quite a few useful and practical things in this book both for component and systems designers. I have found this book to be excellent both in industry and in academic environments. I highly recommend this book.

If you are a beginner or student who has little or no knowledge of fiber optics and intends to understand it, do not buy this book. This book has only briefs on theories and lacks on application.

Fiber-Optic Communication Systems (Wiley Series in Microwave and Optical Engineering) High

Fiber Recipes: 101 Quick and Easy High Fiber Recipes for Breakfast, Snacks, Side Dishes, Dinner and Dessert (high fiber cookbook, high fiber diet, high fiber recipes, high fiber cooking) Optical Thin Films: User's Handbook (Macmillan Series in Optical and Electro-Optical Engineering) Passive Macromodeling: Theory and Applications (Wiley Series in Microwave and Optical Engineering) SiGe, GaAs, and InP Heterojunction Bipolar Transistors (Wiley Series in Microwave and Optical Engineering) Fiber-Optic Communication Systems Easy Livin' Microwave Cooking: A microwave instructor shares tips, secrets, & 200 easiest recipes for fast and delicious microwave meals Mug Cakes Cookbook: My Top Mug Cake Recipes for Microwave Cakes (microwave mug recipes, microwave cake, mug cakes, simple cake recipes) Optical Fiber Communication Systems (Artech House Optoelectronics Library) Optical Design for Visual Systems (SPIE Tutorial Texts in Optical Engineering Vol. TT45) The Engineering Design of Systems: Models and Methods (Wiley Series in Systems Engineering and Management) Complete Guide to Fiber Optic Cable Systems Installation Resistant Starch: The Resistant Starch Bible: Resistant Starch - Gut Health, Fiber, Gut Balance (Gut Balance, Glycemic, Natural Antibiotics, Dietary Fiber, SIBO, Soluble FIber, Healthy Gut Book 1) Foods High in Fiber Cookbook: List of High Fiber Foods for a Healthy Lifestyle - Recipes for High Fiber Foods optical communication and splicing: optical networks Broadband Circuits for Optical Fiber Communication Handbook of Optical and Laser Scanning, Second Edition (Optical Science and Engineering) Electro-Optical Displays (Optical Science and Engineering) Resolution Enhancement Techniques in Optical Lithography (SPIE Tutorial Texts in Optical Engineering Vol. TT47) Optical Fiber Telecommunications Volume VIB: Systems and Networks (Optics and Photonics)