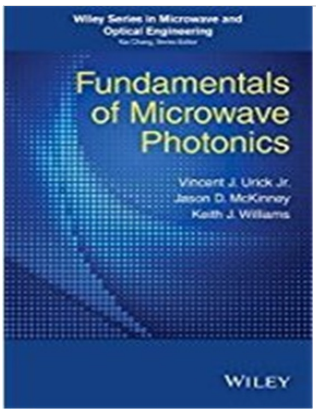
Book Information Sheet



Fundamentals of Microwave Photonics: Wiley Series in Microwave and Optical Engineering

V. J. Urick, Jason D. McKinney & Keith J. Williams

2018 **488 pp** **Paperback** **ISBN: 9788126574230** **Price: 1,395.00**

About the Book

A comprehensive resource to designing and constructing analog photonic links capable of high RF performance

Fundamentals of Microwave Photonics provides a comprehensive description of analog optical links from basic principles to applications. The book is organized into four parts. The first begins with a historical perspective of microwave photonics, listing the advantages of fiber optic links and delineating analog vs. digital links. The second section covers basic principles associated with microwave photonics in both the RF and optical domains. The third focuses on analog modulation formats—starting with a concept, deriving the RF performance metrics from basic physical models, and then analyzing issues specific to each format. The final part examines applications of microwave photonics, including analog receive-mode systems, high-power photodiodes applications, radio astronomy, and arbitrary waveform generation.

Salient Features

Covers fundamental concepts including basic treatments of noise, sources of distortion and propagation effects
Provides design equations in easy-to-use forms as quick reference
Examines analog photonic link architectures along with their application to RF systems
A thorough treatment of microwave photonics, Fundamentals of Microwave Photonics will be an essential resource in the laboratory, field, or during design meetings.
The authors have more than 55 years of combined professional experience in microwave photonics and have published more than 250 associated works.

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