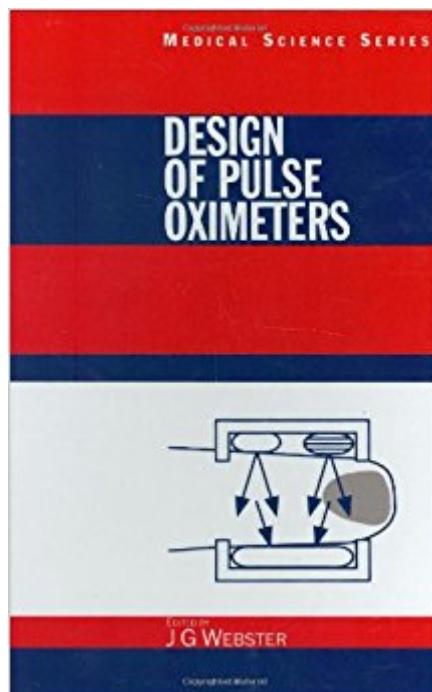


The book was found

# Design Of Pulse Oximeters (Series In Medical Physics And Biomedical Engineering)



## Synopsis

Design of Pulse Oximeters describes the hardware and software needed to make a pulse oximeter, and includes the equations, methods, and software required for them to function effectively. The book begins with a brief description of how oxygen is delivered to the tissue, historical methods for measuring oxygenation, and the invention of the pulse oximeter in the early 1980s. Subsequent chapters explain oxygen saturation display and how to use an LED, provide a survey of light sensors, and review probes and cables. The book closes with an assessment of techniques that may be used to analyze pulse oximeter performance and a brief overview of pulse oximetry applications. The book contains useful worked examples, several worked equations, flow charts, and examples of algorithms used to calculate oxygen saturation. It also includes a glossary of terms, instructional objectives by chapter, and references to further reading.

## Book Information

Series: Series in Medical Physics and Biomedical Engineering

Hardcover: 260 pages

Publisher: CRC Press; 1 edition (October 23, 1997)

Language: English

ISBN-10: 0750304677

ISBN-13: 978-0750304672

Product Dimensions: 6.1 x 0.7 x 9.2 inches

Shipping Weight: 1.2 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 stars 3 customer reviews

Best Sellers Rank: #1,147,040 in Books (See Top 100 in Books) #37 in Books > Textbooks > Medicine & Health Sciences > Reference > Instruments & Supplies #46 in Books > Medical Books > Medicine > Prosthesis #59 in Books > Medical Books > Medicine > Reference > Instruments & Supplies

## Customer Reviews

..." a complete guide to understanding, using, and designing the PO ... for biomedical engineers and for all those who need to know the technical workings of this instrument ... provides complete coverage of the field - from basic principles and techniques to signal-processing algorithms and calibration ... with an abundance of figures, tables and equations, the book is easy to read and clear in understanding ... particularly useful for graduate students, biomedical technicians as the essential reference .. the best book to date ..." Valentin Grimblatov, Columbia-Presbyterian Medical Center,

IEEE EMBS Magazine, May/June 1998 ..." an excellent overview ... a must for biomedical engineers and medical physicists ... valuable contribution to clinical instrumentation and physiological measurement ... reasonably priced and ... worth buying." John Allen, Freeman Hospital, IFMBE News, May 1998 complete guide to understanding, using, and designing the PO ... for biomedical engineers and for all those who need to know the technical workings of this instrument ... provides complete coverage of the field - from basic principles and techniques to signal-processing algorithms and calibration ... with an abundance of figures, tables and equations, the book is easy to read and clear in understanding ... particularly useful for graduate students, biomedical technicians as the essential reference .. the best book to date ... ." Valentin Grimblatov, Columbia-Presbyterian Medical Center, IEEE EMBS Magazine, May/June 1998 ..." an excellent overview ... a must for biomedical engineers and medical physicists ... valuable contribution to clinical instrumentation and physiological measurement ... reasonablypriced and ... worth buying." John Allen, Freeman Hospital, IFMBE News, May 1998

It's a good book for students explaining the basic concepts. A modern pulse oximeter has complex signal processing algorithms implemented, which make it robust against motion artifacts. This is not covered in the book.

it sounds to be a good reference for students studing and researching about pulse oximeter. may be good reference for pulse oximeter designers!( it depend to how the level of complete contents or text would be)

This book give idel how pulse oxymeter work.The thing that alway the black box for biomed.anyway after readind this book you can not design any oxymeter device.

[Download to continue reading...](#)

Design of Pulse Oximeters (Series in Medical Physics and Biomedical Engineering) Biomedical Engineering Principles Of The Bionic Man (Series on Bioengineering & Biomedical Engineering) (Bioengineering & Biomedical Engineering (Paperback)) Biomedical Ethics for Engineers: Ethics and Decision Making in Biomedical and Biosystem Engineering (Biomedical Engineering Series) EMP: Electromagnetic Pulse. Protect Your Family and Survive Long After the EMP (Prepping, Survival, Homesteading, Preparedness, EMP, Electromagnetic pulse) An Introduction to Rehabilitation Engineering (Series in Medical Physics and Biomedical Engineering) Biomedical Engineering: Bridging Medicine and Technology (Cambridge Texts in Biomedical Engineering)

Biomedical Engineering for Global Health (Cambridge Texts in Biomedical Engineering) Biomedical Engineering Fundamentals (The Biomedical Engineering Handbook, Fourth Edition) (Volume 1) Introduction to Medical Imaging: Physics, Engineering and Clinical Applications (Cambridge Texts in Biomedical Engineering) Foundations of Biomedical Ultrasound (Biomedical Engineering Series) Medical Device Technologies: A Systems Based Overview Using Engineering Standards (Academic Press Series in Biomedical Engineering) Laser-Tissue Interactions: Fundamentals and Applications (Biological and Medical Physics, Biomedical Engineering) 4D Modeling and Estimation of Respiratory Motion for Radiation Therapy (Biological and Medical Physics, Biomedical Engineering) Laser Technology in Biomimetics: Basics and Applications (Biological and Medical Physics, Biomedical Engineering) An Introduction to Modeling of Transport Processes: Applications to Biomedical Systems (Cambridge Texts in Biomedical Engineering) The Physical Basis of Bacterial Quorum Communication (Biological and Medical Physics, Biomedical Engineering) Medical Terminology: Medical Terminology Easy Guide for Beginners (Medical Terminology, Anatomy and Physiology, Nursing School, Medical Books, Medical School, Physiology, Physiology) Medical Terminology: Medical Terminology Made Easy: Breakdown the Language of Medicine and Quickly Build Your Medical Vocabulary (Medical Terminology, Nursing School, Medical Books) The Solid State: An Introduction to the Physics of Crystals for Students of Physics, Materials Science, and Engineering (Oxford Physics Series) Principles of Biomedical Ethics (Principles of Biomedical Ethics (Beauchamp))

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)