



Infrared System Engineering

By Richard D. Hudson

Wiley-Interscience, 1969. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Part I The Elements of the Infrared System Chapter 1 Introduction to Infrared System Engineering 1.1 The Development of the Infrared Portion of the Spectrum 1.2 The Market for Infrared Devices 1.3 System Engineering 1.4 The System Engineer 1.5 The Infrared System and the Organization of This Book 1.6 The Literature of the Infrared 1.7 The Symbols and Abbreviations Used in This Book Chapter 2 Infrared Radiation 2.1 The Electromagnetic Spectrum 2.2 Terminology Used in the Measurement of Radiant Energy 2.3 The Measurement of Radiant Flux 2.4 Thermal Radiation Thermal Radiation Laws 2.5 Emissivity and Kirchhoff's Law 2.6 Selective Radiators Absorption Spectra of Gases Absorption Spectra of Liquids and Solids Molecular Emission Spectra 2.7 Aids for Radiation Calculations Radiation Slide Rules Charts and Monographs Tables of Blackbody Functions 2.8 Other Blackbody Relationships Efficiency of Radiation Production Radiation Contrast Chapter 3 Sources of Infrared Radiation 3.1 Blackbody-Type Sources Theoretical Principles Construction of a Blackbody-Type Source 3.2 Standards for Sources of Radiant Energy 3.3 General-Purpose Sources of Infrared The Nernst Glower The Globar The Carbon Arc The Tungsten Lamp The Xenon Arc Lamp The Laser The...

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Part I The Elements of the Infrared System

Chapter 1 Introduction to Infrared System Engineering

1.1 The Development of the Infrared Portion of the Spectrum

1.2 The Market for Infrared Devices

1.3 System Engineering

1.4 The System Engineer

1.5 The Infrared System and the Organization of This Book

1.6 The Literature of the Infrared

1.7 The Symbols and Abbreviations Used in This Book

Chapter 2 Infrared Radiation

2.1 The Electromagnetic Spectrum

2.2 Terminology Used in the Measurement of Radiant

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