Infrared System Engineering

By Richard D. Hudson

HGH Infrared Systems develops high end optronic systems, for applications in wide area surveillance, industrial thermography, and IR test and measurement. HGH: IR systems for 360-degree surveillance. HGH: A wide range of IR test equipment. HGH: Expert in industrial thermography. Richard D. Hudson. This classic opens with a history of the development of the infrared portion of the spectrum, probes the system engineering process, and then examines the characteristics of the successful system engineer. The next eleven chapters delve deeply into the elements of infrared technology. Chapter 13 explains the functional relationships between the various system elements and the effects of their interactions when assembled into a system. 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
Infrared System Engineering. Download Product Flyer. Description. Part 1. The elements of the infrared system. Chapter 1: Introduction to Infrared System Engineering. Chapter 2: Infrared Radiation. Chapter 3: Source of Infrared Radiation. Session 1 Systems Engineering Overview Stakeholder Analysis. 1. Class Parameters. This class is an introduction to the Fundamentals of Systems Engineering, a “door opener” to this important and evolving field. The FLIR System AN/AAQ-22 Star SAFIRE electro-optical/infrared sensor has been designed to provide full digital high-definition (1280x720) video compliant with US and NATO specifications. L-3: Adds/Removes Hardware & Details. L0: Top Kit Collector L-1: Avionics Sub Kit. Infrared Systems for Homeland Security. Photonics-Enabled Technologies. Optics and photonics series. This ratio is used by engineers to determine how much useful signal will be available from a system that contains noise sources. Figure 11 shows an example of a signal that has noise on it. The signal has a sinusoidal shape.