



IBM-PC in the Laboratory

By B. G. Thompson

Cambridge University Press. Paperback. Condition: New. 260 pages. Dimensions: 9.5in. x 7.4in. x 0.7in.This book is about how microcomputers can be used to help control and interface with sensors in laboratory experiments. The computer work is done mostly in the context of several physics experiments, such as the physics of activation temperature, heat diffusion, and motion in fluids. These experiments show how with computer control conceptually sophisticated experiments can be performed with simple apparati. The authors explain how the computer interfaces with common sensing devices, including digital-to-analog coverter, analog-to-digital converter, timers, digital input and output devices, optical encoders, stepping motors, and analog amplifiers, to provide a link between the experimenter and the physical phenomena being studied. The authors chose the IBM-PC, AT, or XT (which can apply to clones as long as they have expansion slots to accomodate boards) as their example, and use Turbo Pascal (Version 4. 0 or greater) throughout the book for programming. Most of the programs will be presented by way of example, so some experience in computer programming is necessary. The equivalent of two semesters of college physics is also helpful to understand the experiments. This item ships from multiple locations. Your book may arrive...



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