



METADATA

Title: Introductory Topics in Electronics

Other Titles: Principles of Electrical and Electronic Circuits – Voltage Operational Amplifiers

Language: Greek

ISBN: 978-960-603-174-8

Subject: ENGINEERING AND TECHNOLOGY, NATURAL SCIENCES AND AGRICULTURAL SCIENCES

Keywords: Analog electronics / Electronics / Electronic circuits / Operational amplifiers



Bibliographic Reference: Tompras, G. (2015). Introductory Topics in Electronics [Undergraduate textbook]. Kallipos, Open Academic Editions. <http://dx.doi.org/10.57713/kallipos-972>

Abstract

This book is considered as the first part of a generalized introduction to Modern Electronics. It focuses on the general characteristics of the analysis of basic voltage and current operation of simple electrical and electronics circuits in both the time and frequency domain. At first, basic concepts and physical laws of electricity, elements of signal analysis and processing, as well as elements from circuit

and system theory are presented, highlighting the physical importance of electric current flow control in them and the possibility of considering equivalent forms of operation. Following that, voltage operational amplifiers are introduced as independent building blocks of equivalent electronic circuits allowing basic forms of linear and nonlinear operations to be presented and analyzed as working examples.

