

Power Electronics & Its	
Applications	

Author :	Abhay Wagh
ISBN 13 :	978-93-55380-42-5
ISBN 10 :	93-55380-42-9
E-ISBN 13:	978-93-55380-42-5
Edition :	First
Pages :	296
Type of book :	Paperback
Weight (g) :	400.00
Year :	2022
Language :	English
Publisher :	Khanna Publishing House
M.R.P:	Rs 495.00
Categories :	Electrical, Electronics & Communication Engineering
Condition Type :	New
Country Origin :	India

Product Description

Power electronics systems are used in a wide range of applications and have the potential to impact many areas of global industrial and social activity. From cell phones to pacemakers, and utilities to automobiles, power electronics, and the engineering behind those electronics are very influential in peoples' daily lives. A comprehensive self-contained text book covers principles of Power Electronics and its Applications. It provides a basic approach for the development of fundamental concepts and deep insight into the subject matter. This text book develops the subject matter in a simplified sequential manner. Theoretical explanation is supported by graded solved examples and multiple-choice questions, which have been framed to help the students in grasping the theoretical principles and their applicability with coverage of various topics. The book meets the requirements of undergraduate and postgraduate students of engineering and also guide for practicing engineer in the area of power electronics. It is also useful for those who are preparing for professional competitive examinations.



Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002 Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: + +91-99109 09320

Table of Contents

Chapter 1: Introduction to power Electronics. Chapter 2: Power Electronic Devices. Chapter 3: AC to DC
Converters. Chapter 4: DC to DC Converter. Chapter 5: PWM Inverter. Chapter 6: Resonant Pulse Converter.
Chapter 7: Power Quality. Chapter 8: High Power Factor Converters. Chapter 9: Multilevel Inverters. Chapter 10:
Active Power Filter. Appendix Bibliography Index



Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002 Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: + +91-99109 09320

Authors

Dr. Madhukar Waware He is received the bachelor degree in electrical engineering in 1999 and M.E. Control System in 2003 from WCE, Sangli. He completed Ph.D from Indian Institute of Technology, Roorkee, India in April 2012 with subject of Multilevel Inverter Based Active power Filter. He is Associated Professor in Walchand College of engineering Sangli, Maharashtra India. He has worked as deputy director E governance AICTE New Delhi for five years. His research areas are Multilevel inverter, Power Electronic converters, Power Electronic, and Power Quality.D **S** More He is received the Bachelor degree in electrical engineering in July 1986. After his graduation, he joined Advani Oerlikon Ltd Chinchwad Pune and worked as design engineer in high current rectifiers and DC drives. In May 1989 he joined Premier Automobiles ltd. machine tool division Chinchwad Pune, where he was involved in design of DC drives for CNC machines. He joined Walchand college of Engineering Sangli as lecturer in electrical engineering in August 1990. He completed M.E. Electrical (control system) in 1997. He became Associate Professor in July 2005. He completed Ph.D from IIT Bombay Mumbai in 2010. His research areas are Power electronics and drives, PM machine, Renewable Engineering and smart Grid. Dr. Abhay Wagh He is received the bachelor degree in electronics engineering and the master's degree in power electronics with gold medalist and PhD in electronics and instrumentation. He is working in the field of Technical Education from last 29 years in various capacity: as teaching faculty, trainer, administrator and policy maker. Experience of implementation several projects for Technical Education. Worked as Director, Maharashtra State Board of Technical Education, Mumbai Worked as Deputy Secretary to Government of Maharashtra in Higher & Technical Education Department, Mantralaya. Worked as a Joint Director, Dy. Director & Asst. Director(T) in Director of Technical Education, Maharashtra. Worked as State Project Advisor for the World Bank Assisted 'Technical Education Quality Improvement Programme' Phase II (TEQIP-II) for the State of Maharashtra. Worked for the prestigious 'Rashtriya Uchchatar Shiksha Abhiyan (RUSA)' of Ministry of Human Resource Development (MHRD), Government of India. Worked as State Nodal Officer for the Community College Project of MHRD, Government of India. Vijay Mohale He is received the bachelor degree in electrical engineering in 2011 and the master's degree in electrical power system from Shivaji university Kolhapur India in 2013. He is Assistant Professor in Walchand College of engineering Sangli, Maharashtra India and currently working towards the doctoral degree with the power electronics and hydroelectric machines laboratory, Indian Institute of Technology Roorkee, India. His current area of interest include transients in power systems, electromagnetic compatibility, power system transportation and power electronics for renewable grid integration. He has filled seven Indian patents and two Australian patents. He is chartered engineer with life member of IE, CMSI and ISTE.



Khanna Publishing House

4C/4344, Ansari Road, Daryaganj, New Delhi-110002 Email: contact@khannabooks.com | Tel: 011-2324 44 47 - 48 | Mobile: + +91-99109 09320