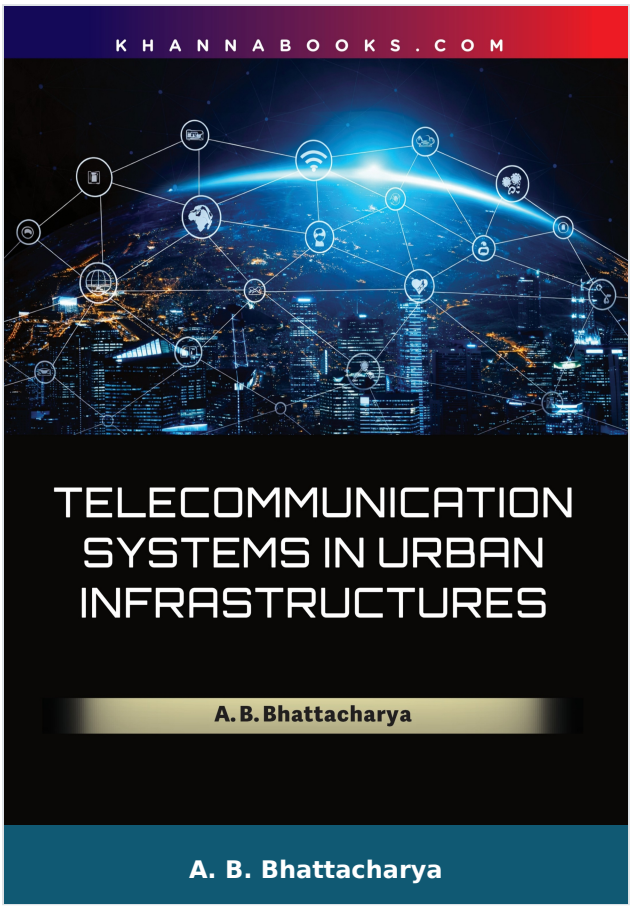


Telecommunication Systems In Urban Infrastructures

Author :	A. B. Bhattacharya
ISBN 13 :	978-93-74542-78-1
ISBN 10 :	9374542781
E-ISBN 13 :	978-93-74542-78-1
Edition :	First
Pages :	344
Type of book :	Physical
Year :	2026
Language :	English
Publisher :	Khanna Publishing House
M.R.P :	Rs 495.00
Categories :	Electrical, Electronics & Communication Engineering, Book Store, New Arrivals
Condition Type :	New
Country Origin :	India

Product Description

Telecommunication Systems In Urban Infrastructures

Modern cities run on connectivity. From smart transport and energy grids to IoT-enabled homes and resilient emergency networks, telecommunication on systems form invisible backbone of urban life. Telecommunication systems in Urban Infrastructure delivers a comprehensive, practical, and future-focused exploration of how communication technologies design, support, and transform smart cities.

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Readers will explore:

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- Smart city connectivity for transport, utilities, building, and public spaces
- IoT integration, cyber security, and urban data privacy
- Planning, deployment, and economic challenges in dense urban environments
- Cutting-edge technologies including AI optimization, edge/cloud computing, and quantum communication
- Global smart city case studies and future sustainability trends

Each chapter is carefully structured with:

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- Numerical problems and technical exercises
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Build smarter networks. Design resilient cities. Shape the connected future.

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Prof. A. B. Bhattacharya did his MSc and PhD degree from the University of Calcutta in Physics and Post-doc from the Massachusetts Institute of Technology (MIT), Cambridge, USA. He worked in close collaboration with the leading laboratories like Lincoln Laboratory; Milestone Hill Observatory; Earth, Atmospheric and Planetary Sciences

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division of MIT and many other well recognized laboratories in India and abroad. He served as Professor & Head of the Department of Physics, University of Kalyani; Dean of Research and Head of the ECE Department, Techno India University; Pro Vice Chancellor of JIS University and Director of Brainware University. He has published 32 text books for Science and Engineering students, two popular books for general readers and over 400 research articles in reputed International Journals. Under his supervision 24 scholars received their doctoral degree. He is a fellow of the Institute of Electronics and Telecommunication Engineers and member of many scientific organizations. India International Friendship Society awarded him the prestigious "Shiksha Ratna Award" and Certificate of Excellence for meritorious services, outstanding performance and significant contribution to education. The International Institute of Success Awareness hon0red him with their globally recognized "Glory of India Gold Medal" for his outstanding contribution to the national stature of India. A few words from the certificate issued by Prof. Williams of MIT may be quoted "Our collaborative effort was directed at the wavelength dependence of radar echoes observations with the Millstone Hill UHF radar in Westford. He made use of the Charles River Data System computer in the Weather Radar Laboratory for these calculations. His results help to make a convincing case that the volume reflectivity associated with lighting is a diminishing function of radar wavelength, contrary to contemporary thinking". Dr.

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