

<<无线数据传输网络>>

图书基本信息

书名：<<无线数据传输网络>>

13位ISBN编号：9787115094674

10位ISBN编号：7115094675

出版时间：2001-8

出版单位：人民邮电出版社

作者：Gil Held

页数：344

版权说明：本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问：<http://www.tushu007.com>

## <<无线数据传输网络>>

### 内容概要

>适合希望了解无线网络数据传输和应用的广大师生和技术人员阅读，对无线网络开发人员更是一本很内行的参考书。

<<无线数据传输网络>>

书籍目录

List of Tables and Figures

Preface

About the Author

About the Reviewers

About the Contributors

Chapter 1 Welcome to the Revolution 1

\* Evolving Wireless Applications 2

· Personal Positioning 3

· Vehicle Positioning 4

· Meter Reading 5

· Mobile Banking and Finance 5

· Brick and Mortar Shopping 6

· Email 7

· Wireless Docking 7

· Web Surfing 8

· LAN Access and Mobility Ports 8

\* Book Preview 8

· Communications Basics 9

· AMPS 9

· D-AMPS 9

· GSM 10

· CDMA 10

· The WAP Suite 10

· LMDS 11

· MMDS 11

· Bluetooth 11

· Wireless LANS 12

Chapter 2 Communications Basics 13

\* Powers of 10 14

\* Frequency 15\* Wavelength 16

\* The Frequency Spectrum 17

\* Bandwidth 18

\* Power Measurements 18

· Bel 19

· Decibel 20

· Decibel above 1 mW 20

\* Signal-to-Noise Ratio 21

\* Propagation Loss 23

\* Transmission Rate Constraints 24

· Nyquist Relationship 25

· Shannon's Law 27

\* Radiofrequency Spectrum Allocation 28

· U.S.Spectrum Allocation 28

· Band Nomenclature 29

· Applications 31

## &lt;&lt;无线数据传输网络&gt;&gt;

- Chapter 3 AMPS 33
  - \* Evolution 34
  - \* Components 36
    - Component Relationship 36
  - \* Network Access 37
  - \* Frequency Utilization 37
    - Frequency Allocation 38
    - Channel Center Frequencies 41
    - Channel Utilization 41
  - \* Signaling 51
    - Voice-Channel Signaling 52
    - Cochannel Interference 53
  - \* Data over AMPS 54
    - Case Study and Lessons Learned 54
    - Operating Rates 56
    - Cellular-Ready Modem Protocols 56
- Chapter 4 D-AMPS 63
  - \* Overview 64
  - \* TDMA 65
    - Advantages 67
    - Disadvantages 67
  - \* Digital Radio 67
  - \* Voice-Coding Methods 68
    - Channel Banks 68
    - PCM 68
    - TDM and Line Driver 70
    - Waveform Coding 70
    - Voice Coding 70
    - Hybrid Coding 71
  - \* Modulation 72
  - \* Baud Rate 72
  - \* TDM Operation 73
    - Frames 73
    - Time-Slot Format 75
    - Digital Channel Traffic Signaling 77
    - Control Channel Operations 78
  - \* The IS-136 Digital Control Channel 78
    - PCS Overview 79
    - Extended Battery Life 80
    - Frequency Utilization 81
    - Logical Channels 81
    - Superframes and Hyperframes 84
  - \* The PCS Layered Model 84
  - \* PCS Messaging 86
  - \* Modem Operations 86
- Chapter 5 GSM 87
  - \* Evolution 88

<<无线数据传输网络>>

- \* Frequency Allocation 88
- \* Governing Body 89
- \* GSM Services 89
  - Voice Transport 90
  - Data Services 90
  - Bearer Services 91
  - Teleservices 91
  - Supplementary Services 92
  - The Subscriber Identity Module 93
- \* Frequency Allocation 94
  - Initial European GSM 94
  - United Kingdom GSM 95
  - PCS 1900 96
- \* TDMA Operations 97
  - Time -Slot Utilization 98
- \* Speech Coding 98
- \* Framing and Channel Organization 99
  - The GSM Multiframe 99
- \* Data over GSM 103
  - Modem Incompatibility 103
  - Adapter Use 103
- \* Information Transfer Modes 104
- \* Inbound Data/Fax 104
- \* Data Compression 105
- \* Short Message Service 105
  - Features 106
  - Utilization 108
  - SMS Centers 109
  - Using the Internet 109
- Chapter 6 CDMA 113
  - \* Evolution 114
    - CITA Requirements 114
    - Deployments 115
    - IS-95 115
  - \* Overview 115
    - Comparison With AMPS and TDMA 116
    - Capacity 118
    - Frequency Allocation 118
    - Speech Coding 122
  - \* Channel Structure 124
    - Downlink Channels 124
    - Uplink Channels 129
  - \* CDMA Data Services 131
    - The CDMA Air-Interface Protocol Stack 131
    - SMS 137
  - \* 3G-CDMA 138
    - UMTS/IMT-2000 138

<<无线数据传输网络>>

- CDMA2000 139
- Chapter 7 The WAP Protocol Suite 143
  - \* Overview 144
    - Evolution 144
    - Basic Components 145
    - Architecture 146
  - \* Wireless Datagram Protocol 152
    - Port Number Use 152
    - The Adaptation Layer 154
    - Protocol Operation 154
  - \* Wireless Transport Layer Security 158
    - Connection Management 159
    - Encryption Support 159
  - \* The Wireless Application Environment 162
    - Components 163
    - The Wireless Markup Language 163
- Chapter 8 Local Multipoint Distribution Service 175
  - \* Overview 176
  - \* Frequency Allocation 177
    - Frequency Blocks 177
    - Frequency Bands 178
    - Bandwidth and Capacity 178
  - \* Architecture 180
    - Frequency Considerations 180
    - The LMDS Cell 180
      - Base Station 182
      - The Network Interface Unit 183
      - Access Methods 184
      - Modulation 186
  - \* System Capacity 188
    - FDMA 188
    - TDMA 190
    - Increasing Cell Capacity 190
  - \* LMDS Advantages 191\* LMDS Disadvantages 191
- Chapter 9 Multichannel Multipoint Distribution System 193
  - \* Overview 194
    - Frequency Band 195
    - Potential Market 195
    - Basic Architecture 195
    - Advantages of Use 196
    - Potential Disadvantages 196
  - \* Evolution 196
    - MDS 197
    - MMDS 197
  - \* Frequency Assignments 199
  - \* Transmission Methods 202
    - Multipath Communications 202

<<无线数据传输网络>>

- Minimizing Multipath Reflections 203
- \* Summary 207
- Chapter 10 Bluetooth 209
  - \* Rationale 210
    - Compatibility Problems 210
    - Bluetooth to the Rescue 211
    - Potential Utilization 211\* Evolution 213
    - The Code Name 213
  - \* Overview 214
  - \* Comparison with Infrared(IR) 215
  - \* System Architecture 215
    - Master-Slave Relationship 216
    - Power Requirements 216
    - Power Operating Modes 217
    - Interface Support 218
    - The Protocol Stack 218
    - Adopted Protocols 221
  - \* Communications Channels 221
    - Networking 222
- Chapter 11 Wireless LSNs 229
  - \* General Characteristics 230
    - Spread Spectrum Technology 230
  - \* Applications 238
    - Inventory Control 238
    - Hospital 238
    - Hotel 239
    - Training 239
    - Trade Shows 239
    - Wireless Rationale 240
  - \* The IEEE 802.11 Wireless LAN Standard 240
    - Initial Effort 240
    - Basic Configuration 241
  - \* Frequency Selection 241
  - \* Environment 242
  - \* Architecture 242
    - Operation 261
  - \* Wireless Home Networking 265
    - Overview 265
    - System Requirements 265
    - Technical Characteristics 266
    - Appendix A 271
    - Appendix B 291
    - Appendix C 309
    - Glossary 321
- Index 331

<<无线数据传输网络>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介，请支持正版图书。

更多资源请访问:<http://www.tushu007.com>