TABLE OF CONTENTS

Caution To Users vii

Chapter 1: Introduction

1.1 About This Manual 3
1.2 Text Conventions 4
1.3 About The 9150 4
1.3.1 Base Station Functions 6
1.3.2 Mini-Controller Functions 6
1.3.3 Access Point Functions 6
1.4 Radio Options 7
1.5 Radio Protocols 7
1.5.1 Adaptive Polling/Contention Protocol 8
1.5.2 Wlan Protocol 8
1.5.3 IEEE 802.11 Protocol 10
1.5.3.1 Inter-Access Point Protocol (IAPP) 11

Chapter 2: Installation Requirements

2.1 Choosing The Right Location 15
2.1.1 Environment 15
2.1.2 Maintenance 16
2.1.3 Power And Antenna Cables 16
2.2 Connecting To External Devices 17
2.2.1 Ports 17
2.2.2 Status Indicators (LEDs) 18
2.2.3 Preparing For LAN Installation 18
2.2.3.1 Ethernet 19
2.2.3.2 Token Ring 19
2.2.4 Preparing For Serial Installation 20
2.2.5 Connecting A Video Display Terminal 21
2.3 Changing The Configuration With A Web Browser 21

Chapter 3: 9150 Main Configuration

3.1 Configuration Main Menu . . . 25
3.2 Configuring The IP Address . . . 25
3.3 Accessing The Menus . . . 27
3.4 General Configuration Options . . . 29
3.4.1 Interfaces . . . 30
3.4.1.1 Onboard Ethernet . . . 30
3.4.1.2 Slot n: Token-Ring . . . 32
3.4.1.3 Slot n: PC Card Radio . . . 34
3.4.2 Users . . . 34
3.4.3 SNMP . . . 35
3.4.3.1 System Parameters . . . 36
3.4.3.2 SNMP Communities . . . 36
3.4.3.3 Trap Receivers . . . 36
3.4.4 TCP/IP Parameters . . . 36
3.4.4.1 Host Table . . . 37
3.4.4.2 Bootp . . . 38
3.4.4.3 DNS . . . 39
3.4.5 Serial Ports Parameters . . . 40
3.4.5.1 Console Port . . . 40
3.4.5.2 Serial Port . . . 40
3.5 Access Point/Base Station Configurations . . . 41
3.6 Miscellaneous Commands . . . 42
3.6.1 System Info . . . 42
3.6.2 Reboot Unit . . . 43

Chapter 4: Base Station Configuration

4.1 Overview . . . 47
4.2 Interfaces . . . 49
4.2.1 TekLAN Parameters . . . 49
4.2.1.1 Radio . . . 50
4.2.1.2 Wireless LAN Parameters . . . 52
4.2.2 Narrow Band Radio Parameters . . . 53
4.2.2.1 Polling Protocol Parameters . . . 56
4.2.2.2 Radio Parameters . . . 59
4.2.2.3 Radio Channels . . . 60
4.2.2.4 TRX7370 Radio Card Parameters . . . 60

4.3 Hosts 63
4.4 Main Host Menu 65
4.4.1 General Host Options 66
4.4.2 9010 / TCP/IP 67
4.4.2.1 Emulation Options 67
4.4.2.2 Protocol Options And Function Key Mappings . . 68
4.4.3 9010 / Serial 68
4.4.3.1 Emulation Options 69
4.4.3.2 Protocol Options: Serial Line 69
4.4.3.3 Protocol Options: 9010 Protocol 70
4.4.3.4 Function Key Mappings 70
4.5 Base Stations 71
4.6 Radio Link Features 72

Chapter 5: Mini-Controller Configuration

5.1 Overview 77
5.2 Hosts 80
5.3 Main Host Menu 82
5.3.1 General Options 83
5.3.2 9010 Emulations 84
5.3.3 3274/Telnet 84
5.3.3.1 Emulation Options 84
5.3.3.2 Protocol Options 95
5.3.3.3 Function Key Mappings 98
5.3.4 5250/Telnet 99
5.3.4.1 Emulation Options 99
5.3.4.2 Protocol Options 110
5.3.4.3 Function Key Mappings 112
5.3.5 ANSI/Telnet 113
5.3.5.1 Emulation Options 113
5.3.5.2 Protocol Options 116
5.3.5.3 Function Key Mappings 121

Chapter 6: Access Point Configuration

6.1 Overview 125
6.2 Interfaces 126
6.2.1 IEEE 802.11 (Frequency Hopping Radio Parameters) . . . 126

6.2.2 IEEE 802.11 (Direct Sequence Radio Parameters) 128
6.3 MAC Bridge Parameters 129
6.3.1 General Configuration 131
6.3.2 Address Filters: MAC Address 132
6.3.3 Protocol Filters 133
6.3.3.1 Ethernet II Filters 136
6.3.3.2 LLC Filters 137
6.3.3.3 SNAP Filters 138
6.3.3.4 Storm Detection 139
6.4 Mobility Configuration 140
6.4.1 IAPP Parameters 142

Chapter 7: Specifications

7.1 Specifications For The 9150 Wireless Gateway 145
7.1.1 PC Card Radios 145
7.1.2 Power Requirements 146
7.1.3 Physical Description 146
7.1.4 Processor And Memory 147
7.1.5 Environmental Requirements 147
7.1.6 Network Interfaces 147
7.1.7 SLIM Cards 147
7.1.8 Approvals 147

Appendices

Appendix A: Port Pinouts And Cable Diagrams

A.1 Console Port A-1
A.2 RS-232 Plus Port (SLIM Card) A-1
A.3 RS-232/Current Loop Port (SLIM Card) A-2
A.4 DA15 Connector Pinout (10Base5 Ethernet) A-3
A.5 RJ-45 Connector Pinouts (10Base-T Ethernet) A-4
A.6 Token Ring Dsub9 Connector A-5
A.7 Serial Cable Descriptions A-6

Appendix B: MAC Bridge Protocol Filters and OUIs

B.1 Ethernet II Types (RFC 1700) B-1

B.1.1 Listing by Description B-1
B.1.2 Listing By Type (Hexadecimal) B-8
B.2 DSAP/SSAP Types B-14
B.3 OUI Values B-15

Index I