
Cisco Industrial Routers and Industrial Wireless Access Points Antenna Guide	21
Overview	21
Safety Precautions	21
Installation Requirements	22
Installation Location.	22
Antenna Connections	23
Optimum Performance	23
General Installation Instructions for Mounting Antennas.	24
Unused Antenna Ports	25
Obtaining Technical Assistance	25
Additional Information	25
Antenna Information	25
Product Specific Guides for Industrial Routers.	26
Cisco General Information.	26
Antenna Selection Table.	27
Currently Supported Antennas	27
Cellular 2G/3G/4G Antennas	28
GPS/GNSS Antennas.	32
WPAN, ISM, and LoRaWan Antennas.	35
Wi-Fi Antennas	35
Single Band 2.4 GHz Antennas	37
Single Band 5 GHz Antennas	37
Dual Band 2.4 GHz + 5 GHz Antennas.	39
Planned EOS Antennas	41
EOS Antennas.	42
Cisco RF Cables, Adapters, Lightning Arrestors, Extension Bases and other Accessories	
43	
Cables	43
Cellular Antenna Extension Bases	43
Other Accessories.	43
Cellular Antenna Extension Bases	49
Accessories	50
Cisco 4G Indoor Ceiling-Mount Omnidirectional Antenna (4G-ANTM-OM-CM)	51
Overview	51
Technical Specifications	54
System Requirements.	79
Installation Notes	79
Safety Instructions	80
Installation Instructions	81

Obtaining Documentation	83
Cisco.com.	84
Cisco 4G/3G Omnidirectional Dipole Antenna (4G-LTE-ANTM-D)	85
Overview	85
Specifications	87
System Requirements	93
Installation Notes	93
Safety Instructions	94
Cisco Dual LTE-Single GPS Multi-band Antenna Installation Guide (4G-LTE-ANTM-O-3-B)	96
Overview of the 4G-LTE-ANTM-O-3-B Antenna	96
Parts List	97
Features of the 4G-LTE-ANTM-O-3-B Antenna	97
Technical Specifications	97
Supported Antennas	106
Supported Antenna Accessories	107
Antenna Options by Deployment Type	107
Safety Precautions	108
Statement 1052—Installing and Grounding the Antenna	108
Statement 1024—Ground Conductor	108
Statement 1025—Use Copper Conductors Only	108
Statement 1046—Installing or Replacing the Unit	108
Installation Instructions	109
Deployment Scenarios	111
Related Documentation	112
Obtaining Documentation and Submitting a Service Request	112
Cisco Aironet 2.4 GHz 13-dBi Directional Antenna (AIR-ANT2413P2M-N)	114
Technical Specifications	115
System Requirements	115
Safety Precautions	116
Installation Guidelines	117
Site Selection	117
Installing the Antenna	117
Tools and Equipment Required	117
Mounting on a Pole	118
Installing the Optional Mounting Bracket Kit	123
Mounting on a Vertical Surface	123
Antenna Cable Information	125
Grounding the Antenna	125

Obtaining Documentation and Submitting a Service Request	125
Cisco Aironet Omnidirectional Antennas AIR-ANT2450V-N, AIR-ANT2450VG-N, AIR-ANT2450V-N-HZ, and AIR-ANT2450HG-N.	127
Technical Specifications	128
Radiation Patterns.	128
AIR-ANT2450V-N, AIR-ANT2450VG-N, and AIR-ANT2450V-N-HZ.	129
AIR-ANT2450HG-N.	130
System Requirements.	130
Safety Precautions	130
Installation Notes	131
Choosing a Mounting Location	131
Tools and Equipment Required	131
Mounting the Antenna	131
Obtaining Documentation and Submitting a Service Request	131
Cisco Aironet 6.5-dBi Diversity Patch Antenna (AIR-ANT2465P-R)	133
Technical Specifications	134
System Requirements.	134
Safety Precautions	135
Installation Guidelines	136
Site Selection	136
Installing the Antenna	137
Tools and Equipment Required	137
Mounting on a Vertical Surface	137
Outdoor Installations	138
Suggested Cable	138
Grounding the Antenna	138
Communications, Services, and Additional Information	138
Cisco Bug Search Tool	139
Cisco Aironet 8-dBi Omni-Directional Antenna (AIR-ANT2480V-N)	141
Technical Specifications	142
System Requirements.	144
Safety Precautions	144
Installation Notes	144
Choosing a Mounting Location	145
Tools and Equipment Required	145
Mounting the Antenna	145
Communications, Services, and Additional Information	146
Cisco Aironet Four-Port Dual-Band Polarization-Diverse Antenna	

(AIR-ANT2513P4M-N)	148
Technical Specifications	149
2.4 GHz Antenna Radiation Patterns	149
5 GHz Antenna Radiation Patterns	150
Antenna and Bracket Dimensions	151
System Requirements	153
Safety Instructions	153
Installation Notes	154
Choosing a Mounting Location	154
Installing the Antenna	154
Contents of Antenna Bracket Kit	154
Tools and Equipment Required	155
Mounting on a Wall or Ceiling	156
Mounting on a Pole or Mast	158
Suggested Cable	158
Painting the Antenna	158
Obtaining Documentation and Submitting a Service Request	159
 Cisco Aironet Four-Element, MIMO, Dual-Band Ceiling Mount Omni-Directional Antenna (AIR-ANT2524V4C-R)	 160
Technical Specifications	161
System Requirements	163
Safety Instructions	164
Installation Notes	164
Choosing a Mounting Location	165
Installing the Antenna	165
Tools and Equipment Required	165
Installing the Antenna	165
Mounting the Antenna on a Ceiling Tile	166
Suggested Cable	167
Obtain Documentation and Submit a Service Request	167
 Cisco Aironet Dual-Band MIMO Wall-Mounted Omnidirectional Antenna (AIR-ANT2544V4M-R)	 169
Technical Specifications	170
System Requirements	172
Safety Precautions	173
Installation Notes	173
Choosing a Mounting Location	174
Installing the Antenna	174
Tools and Equipment Required	174
Mounting on a Vertical Surface	175

Outdoor Installations	178
Mounting on a Ceiling	178
Mounting on a Mast.	179
Suggested Cable	180
Obtain Documentation and Submit a Service Request.	180
Cisco Aironet Dual-Band Omni-Directional Antenna (AIR-ANT2547V-N, AIR-ANT2547V-N-HZ, and ANT2547VG-N)	181
Technical Specifications	182
System Requirements.	183
Safety Precautions	183
Installation Notes	184
Choosing a Mounting Location	184
Tools and Equipment Required	184
Mounting the Antenna	185
Obtaining Documentation and Submitting a Service Request	185
Cisco Aironet 2.4 GHz and 5 GHz Dual-Band Polarization-Diverse Directional Array Antenna (AIR-ANT2566D4M-R)	187
Technical Specifications	188
Azimuth and Elevation Radiation Patterns	189
Safety Precautions	189
Installation Notes	190
Contents of the Antenna and Bracket Kit.	191
Dimensions of the Antenna and Brackets	191
Installing the Antenna	194
Deciding on a Mounting Location	195
Tools and Equipment Required	195
Mounting on a Wall or Ceiling	195
Mounting on a Pole or Mast.	200
Flush Mounting on a Wall Without Mount Brackets	202
Recommended Cable	203
Painting the Antenna	204
Obtain Documentation and Submit a Service Request.	204
Cisco Aironet 2.4-GHz/5-GHz MIMO 4-Element Patch Antenna (AIR-ANT2566P4W-R) 205	
Technical Specifications	206
System Requirements.	208
Safety Precautions	208
Installation Notes	209
Choosing a Mounting Location	210

Installing the Antenna	210
Tools and Equipment Required	210
Mounting on a Vertical Surface	210
Outdoor Installations	211
Suggested Cable	211
Obtain Documentation and Submit a Service Request.	211
Cisco Aironet Dual-Band Omni-Directional Antenna (AIR-ANT2568VG-N).	212
Technical Specifications	213
System Requirements.	215
Safety Precautions	215
Installation Notes	215
Choosing a Mounting Location	216
Tools and Equipment Required	216
Mounting the Antenna	216
Communications, Services, and Additional Information	216
Cisco Aironet 2.4-GHz/5-GHz 8-dBi Directional Antenna (AIR-ANT2588P3M-N)	218
Technical Specifications	219
Azimuth and Elevation Radiation Patterns	221
System Requirements.	222
Safety Precautions	222
Installation Guidelines	223
Site Selection	223
Installing the Antenna	224
Tools and Equipment Required	224
Mounting on a Pole	224
Mounting on a Vertical Surface	228
Antenna Cable Information	230
Grounding the Antenna	230
Cisco Aironet 5-GHz 13-dBi Directional Antenna (AIR-ANT5114P2M-N).	232
Technical Specifications	233
Elevation and Azimuth Plane Patterns	234
System Requirements.	234
Safety Precautions	234
Installation Guidelines	235
Site Selection	236
Installing the Antenna	236
Required Tools and Equipment	236
Mounting on a Pole	237
Installing the Optional Mounting Bracket Kit.	241

Mounting on a Vertical Surface	241
Antenna Cable Information	243
Grounding the Antenna	243
Obtain Documentation and Submit a Service Request.	243
Cisco Aironet Omnidirectional Antennas AIR-ANT5150VG-N and AIR-ANT5150HG-N	246
Technical Specifications	247
System Requirements.	249
Safety Precautions	249
Installation Notes	250
Choosing a Mounting Location	250
Tools and Equipment Required	250
Mounting the Antenna	251
Obtaining Documentation and Submitting a Service Request	251
Cisco Aironet 8-dBi Omnidirectional Antenna (AIR-ANT5180V-N)	252
Technical Specifications	253
System Requirements.	253
Safety Precautions	254
Installation Notes	254
Choosing a Mounting Location	255
Tools and Equipment Required	255
Mounting the Antenna	255
Communications, Services, and Additional Information	257
Cisco Bug Search Tool	257
Cisco Cellular 2-in-1 Vehicle Mount and Fixed Infrastructure Antenna (ANT-2-4G2-O)	258
Antenna Overview	258
Antenna Features	258
Antenna Model	259
Antenna Assembly	259
Technical Specifications	260
Radio Frequency Specifications.	261
Antenna Radiation Patterns	261
698 MHz Cellular Antenna Radiation Patterns	263
880 MHz Cellular Antenna Radiation Patterns	263
960 MHz Cellular Antenna Radiation Patterns	263
1470 MHz Cellular Antenna Radiation Patterns	264
1710 MHz Cellular Antenna Radiation Patterns	264
2170 MHz Cellular Antenna Radiation Patterns	265

2700 MHz Cellular Antenna Radiation Patterns	265
Environmental and Operational Specifications	266
Mechanical Specifications	266
Power Specifications	267
Installing the Antenna	267
Contents of the Antenna Kit	267
Safety Warnings	267
Safety Precautions	268
Tools and Equipment Required	269
Mounting the Antenna	269
Connecting the Antenna to the Router	269
Obtaining Documentation and Submitting a Service Request	269
Cisco Dual Port, Dual Band Vehicle Mount and Fixed Infrastructure WLAN Antenna (ANT-2-WLAN-D-O)	270
Antenna Overview	270
Antenna Features	270
Antenna Model	271
Antenna Assembly	271
Technical Specifications	272
Radio Frequency Specifications	273
Antenna Radiation Patterns	273
2.46 GHz Antenna Radiation Patterns	273
2.46 GHz Antenna Radiation Pattern-Horizontal Plane	274
2.46 GHz Antenna Radiation Patterns-Vertical Plane	274
4.9 GHz Antenna Radiation Pattern	275
4.9 GHz Antenna Radiation Pattern-Horizontal Plane	276
4.9 GHz Antenna Radiation Patterns-Vertical Plane	276
5.55 GHz Antenna Radiation Patterns	277
5.55 GHz Antenna Radiation Pattern-Horizontal Plane	278
5.55 GHz Antenna Radiation Patterns-Vertical Plane	278
5.9 GHz Antenna Radiation Patterns	279
5.9 GHz Antenna Radiation Pattern-Horizontal Plane	280
5.9 GHz Antenna Radiation Patterns-Vertical Plane	280
Environmental and Operational Specifications	281
Mechanical Specifications	281
Power Specifications	281
Installing the Antenna	281
Contents of the Antenna Kit	282
Safety Warnings	282
Safety Precautions	282

Tools and Equipment Required	283
Mounting the Antenna	283
Connecting the Antenna to the Router.	284
Obtaining Documentation and Submitting a Service Request	284
Cisco Cellular and GPS 3-in-1 Vehicle Mount and Fixed Infrastructure Antenna (ANT-3-4G2G1-O)	285
Antenna Overview	285
Antenna Features	285
Antenna Model	286
Antenna Assembly	286
Technical Specifications	287
Radio Frequency Specifications.	288
Environmental Specifications.	290
Mechanical Specifications.	290
Power Specifications.	290
Antenna Radiation Patterns	290
698 MHz Cellular Antenna Radiation Patterns	291
880 MHz Cellular Antenna Radiation Patterns	292
960 MHz Cellular Antenna Radiation Patterns	292
1470 MHz Cellular Antenna Radiation Patterns	293
1710 MHz Cellular Antenna Radiation Patterns	293
2170 MHz Cellular Antenna Radiation Patterns	293
2700 MHz Cellular Antenna Radiation Patterns	294
GPS Antenna Radiation Patterns	294
1575 MHz GPS Antenna Radiation Patterns.	294
Installing the Antenna	295
Contents of the Antenna Kit.	295
Safety Warnings	295
Safety Precautions	296
Tools and Equipment Required	297
Mounting the Antenna	297
Connecting the Antenna to the Router.	297
Obtaining Documentation and Submitting a Service Request	297
Cisco Multiband Panel Outdoor 3G Antenna (ANT-3G-PNL-OUT-N)	299
Technical Specifications	299
RF Specifications	300
Mechanical Specifications.	300
Contents of the Antenna Kit	301
Safety Warnings	302
Safety Precautions	302

Antenna Installation.	303
Tools and Equipment Required	303
Installing the Antenna	304
Connecting the Lightning Arrestor	308
Connecting the Antenna to the Router	308
Obtaining Documentation and Submitting a Service Request	308
Cisco Multiband Indoor 4G Volcano Antenna (ANT-4G-CM-IN-TNC).	310
Technical Specifications	310
RF Specifications	311
Mechanical Specifications.	311
Radiation Patterns	312
Contents of the Antenna Kit	313
Installation Requirements	314
Antenna Connections	314
Optimum Performance	314
Safety Warnings	315
Safety Precautions	315
Antenna Installation.	316
Tools and Equipment Required	316
Installing the Antenna	316
Obtaining Documentation and Submitting a Service Request	317
Cisco Indoor Swivel-mount Dipole Antenna (ANT-4G-DP-IN-TNC)	319
Technical Specifications	319
RF Specifications	321
Mechanical Specifications.	321
Radiation Patterns	321
Installation Requirements	322
Installation Location.	323
Antenna Connections	323
For Optimum Performance	323
Safety Warnings	324
Safety Precautions	324
Antenna Installation.	325
Obtaining Documentation and Submitting a Service Request	326
Cisco Outdoor Omnidirectional Antenna for 2G/3G/4G Cellular (ANT-4G-OMNI-OUT-N)	
327	
Technical Specifications	327
RF Specifications	329
Mechanical Specifications.	329

Radiation Patterns	330
Antenna Kit	335
Safety Warnings	335
Safety Precautions	336
Antenna Installation	337
Tools and Equipment Required	337
Installing the Antenna	337
Cisco Multiband Panel Outdoor 4G MIMO Antenna (ANT-4G-PNL-OUT-N)	339
Antenna Overview	339
Antenna Features	339
Antenna Model	340
Antenna Assembly	340
Technical Specifications	340
Radio Frequency Specifications	341
Antenna Radiation Patterns	341
698 MHz Antenna Radiation Pattern	342
698 MHz Antenna Radiation Pattern—Horizontal Plane	342
698 MHz Antenna Radiation Pattern—Vertical Plane	343
880 MHz Antenna Radiation Pattern	343
880 MHz Antenna Radiation Pattern—Horizontal Plane	344
880 MHz Antenna Radiation Pattern—Vertical Plane	344
960 MHz Antenna Radiation Pattern	345
960 MHz Antenna Radiation Pattern—Horizontal Plane	346
960 MHz Antenna Radiation Pattern—Vertical Plane	346
1710 MHz Antenna Radiation Pattern	347
1710 MHz Antenna Radiation Pattern—Horizontal Plane	348
1710 MHz Antenna Radiation Pattern—Vertical Plane	348
1950 MHz Antenna Radiation Pattern	349
1950 MHz Antenna Radiation Pattern—Horizontal Plane	350
1950 MHz Antenna Radiation Pattern—Vertical Plane	350
2170 MHz Antenna Radiation Pattern	351
2170 MHz Antenna Radiation Pattern—Horizontal Plane	352
2170 MHz Antenna Radiation Pattern—Vertical Plane	352
2700 MHz Antenna Radiation Pattern	353
2700 MHz Antenna Radiation Pattern—Horizontal Plane	354
2700 MHz Antenna Radiation Pattern—Vertical Plane	354
Environmental Specifications	355
Mechanical Specifications	355
Power Specifications	356
Installing the Antenna	356

Contents of the Antenna Kit	356
Safety Warnings	356
Safety Precautions	357
Tools and Equipment Required	358
Preparing the Antenna for Installation	358
Mounting the Antenna	359
Connecting the Lightning Arrestor	359
Connecting the Antenna to the Router	359
Obtaining Documentation and Submitting a Service Request	359
Cisco Integrated 4G Low-profile Outdoor Saucer Antenna (ANT-4G-SR-OUT-TNC) . .	
360	
Technical Specifications	360
RF Specifications	361
Mechanical Specifications	361
Radiation Patterns	362
Installation Requirements	363
Antenna Connections	364
Optimum Performance	364
Safety Warnings	365
Safety Precautions	365
Antenna Installation	365
Tools and Equipment Required	366
Installing the Antenna	366
Obtaining Documentation and Submitting a Service Request	367
Cisco 5-in-1 Vehicle Mount and Fixed Infrastructure Antenna (ANT-5-4G2WL2G1-O)	
368	
Antenna Overview	368
Antenna Features	368
Antenna Model	370
Antenna Assembly	370
Technical Specifications	371
Radio Frequency Specifications	372
Environmental and Operational Specifications	374
Mechanical Specifications	374
Power Specifications	375
Antenna Radiation Patterns	375
698 MHz Cellular Antenna Radiation Patterns	376
880 MHz Cellular Antenna Radiation Patterns	376
960 MHz Cellular Antenna Radiation Patterns	376
1470 MHz Cellular Antenna Radiation Patterns	377

1710 MHz Cellular Antenna Radiation Patterns	377
2170 MHz Cellular Antenna Radiation Patterns	378
2700 MHz Cellular Antenna Radiation Patterns	378
WLAN WiFi Antenna Radiation Patterns	379
2400 MHz WLAN Antenna Radiation Patterns	379
2500 MHz WLAN Antenna Radiation Patterns	379
4900 MHz WLAN Antenna Radiation Patterns	380
5150 MHz WLAN Antenna Radiation Patterns	380
5275 MHz WLAN Antenna Radiation Patterns	381
5875 MHz WLAN Antenna Radiation Patterns	381
GPS Radiation Patterns	382
1575 MHz GPS Antenna Radiation Patterns	382
Installing the Antenna	382
Contents of the Antenna Kit	383
Safety Warnings	383
Safety Precautions	383
Tools and Equipment Required	384
Mounting the Antenna	384
Connecting the Antenna to the Router	385
Obtaining Documentation and Submitting a Service Request	385
Cisco Aironet Dual-band Dipole Antenna (AIR-ANT2524DB-R, AIR-ANT2524DG-R, and AIR-ANT2524DW-R)	386
Technical Specifications	387
System Requirements	387
Features	388
Installing the Antenna	388
Obtain Documentation and Submit a Service Request	388
Cisco GPS Antenna (ANT-GPS-OUT-TNC)	390
Technical Specifications	390
RF Specifications	391
Mechanical and Environmental Specifications	392
Safety Warnings	392
Safety Precautions	393
Antenna Installation	394
Mechanical Drawing	395
Obtaining Documentation and Submitting a Service Request	396
Cisco Outdoor 5 dBI Omni Antenna for 863-928 MHz WPAN, LoRaWan, and ISM (ANT-LPWA-DB-O-N-5)	397
Technical Specifications	397

Specifications	398
Dimensions	400
Antenna Installation.	400
Tools and Equipment Required	401
Mounting Components	401
Antenna Radiation Patterns.	404
Safety Warnings	407
Safety Precautions	408
ANT-MP2-I-OUT-M and ANT-MP2-I-O-SS-M Antenna and Cable Kits	410
Technical Specifications	410
RF Specifications	411
Mechanical Specifications	412
Radiation Patterns	412
Integrated Antenna Kits.	416
Integrated Antenna Kit Inventory	417
Safety Warnings	417
Safety Instructions.	418
Antenna Installation.	419
Installation Notes.	419
Tools and Equipment Required	420
Install the Antenna onto the CGR 1240 Router	420
Obtaining Documentation and Submitting a Service Request	421
Cisco Multi-purpose Integrated Antenna (ANT-MP-INT-OUT-M).	422
Technical Specifications	422
RF Specifications	423
Mechanical Specifications	424
Radiation Patterns	424
Integrated Antenna Kit	434
Integrated Antenna End Kit Inventory	435
Mounted Antenna End Kit Inventory	435
Safety Warnings	435
Safety Instructions.	436
Antenna Installation.	437
Installation Notes.	437
Install the Antenna onto the CGR 1240 Router	438
Obtaining Documentation and Submitting a Service Request	439
Cisco Vandal Resistant Omni-directional Dome Antenna for 860–928 MHz ISM, WPAN and LoRaWAN (ANT-UN-MP-OUT-QMA).	440
Technical Specifications	440

Specifications	441
Vandal Resistance	443
Dimensions	443
Antenna Installation	444
Tools and Equipment Required	444
Mounting Components	445
Mounting the Antenna	445
Using the McMaster Carr Stud Driven Hole Punch	446
Antenna Radiation Patterns	447
Safety Warnings	452
Safety Precautions	452
Obtaining Documentation and Submitting a Service Request	453
Cisco WPAN Dipole Antenna (ANT-WPAN-OD-OUT-N)	454
Antenna Overview	454
Technical Specifications	455
RF Specifications	456
Radiation Patterns	456
Environmental and Mechanical Specifications	457
Installing the Antenna	458
Contents of the Antenna Kit	458
Safety Warnings	458
Safety Instructions	459
Tools and Equipment Required	460
Mounting the Antenna	460
Obtaining Documentation and Submitting a Service Request	460
Cisco Outdoor Omni Antenna for 900 MHz WPAN (ANT-WPAN-OM-OUT-N)	461
Technical Specifications	461
RF Specifications	462
Mechanical Specifications	462
Safety Warnings	465
Safety Precautions	465
Antenna Installation	466
Tools and Equipment Required	466
Attaching the Mounting Bracket	466
Installing the Module into the Router	467
Obtaining Documentation and Submitting a Service Request	467
Cisco WPAN Yagi Antenna (ANT-WPAN-Y-OUT-N)	468
Antenna Overview	468
Technical Specifications	469

RF Specifications	469
Radiation Patterns	469
860 MHz Antenna Radiation Pattern	470
902 MHz Antenna Radiation Pattern	472
910 MHz Antenna Radiation Pattern	474
928 MHz Antenna Radiation Pattern	476
960 MHz Antenna Radiation Pattern	478
Environmental and Mechanical Specifications	479
Installing the Antenna	479
Contents of the Antenna Kit.	480
Safety Warnings	480
Safety Instructions.	481
Tools and Equipment Required	481
Preparing the Antenna for Installation	482
Mounting the Antenna	482
Connecting the Lightning Arrestor.	482
Connecting the Antenna to the Router.	482
Obtaining Documentation and Submitting a Service Request	482
Cisco Indoor/Outdoor Active GPS Antenna (GPS-ACT-ANTM-SMA)	483
Specifications.	484
Installing the Cisco Active GPS Antenna	485
Installation Guidelines for the Cisco Active GPS Antenna.	485
Mounting the Cisco Active GPS Antenna Without Bracket	485
. Mounting the Cisco Active GPS Antenna With the Bracket	486
Obtaining Documentation and Submitting a Service Request	486
Cisco 4G LTEA, 4G LTE, and 3G Omnidirectional Dipole Antenna (LTE-ANTM-SMA-D)	
487	
Overview	487
Specifications	488
Antenna Radiation Patterns.	490
Safety Instructions	495
Antenna Installation Warning	495
Installation Instructions	496
Related Documentation.	497
Communications, Services, and Additional Information	497
Cisco Bug Search Tool	497
Outdoor Panel Antenna for WiMAX 1.8, 2.5, and 3.8 GHz	498
WiMAX 1.8 GHz Technical Specifications	498
RF Specifications	499

Mechanical Specifications	499
WiMAX 2.5 GHz Technical Specifications	499
WiMAX 3.8 GHz Technical Specifications	501
Safety Warnings	502
Safety Precautions	503
Antenna Installation.	503
Tools and Equipment Required	503
Installing the Antenna	504
Connecting the Antenna to the Router	509
Obtaining Documentation and Submitting a Service Request	509