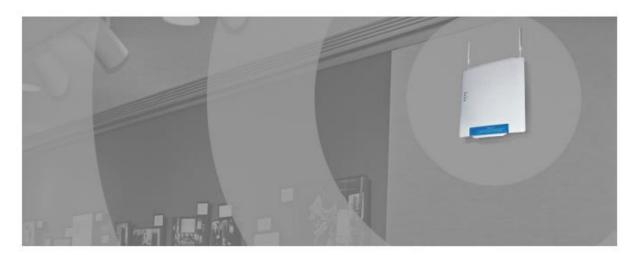
AT&T MetroCell 9962





For the Alcatel-Lucent 9962 Multi-standard Enterprise Cell v1



Contents

| Welcome! | 2 |
|---|-----------------------------|
| Customer responsibilities | 2 |
| Frequently asked questions | 2 |
| Getting started | 3 |
| Using the AT&T MetroCell website MetroCell product page (att.com/metrocell) Authentication Manage my MetroCell page - MetroCell group - Filter List of MetroCells - Acting on a MetroCell Activation - Terms and conditions - E911 address - Additional registration information - Completing activation MetroCell device settings page Approved user list | 3 3 3 4 4 4 4 5 5 5 5 5 6 6 |

| Appendix A: Local transport requirements TCP/UDP Ports P Address Pass-Through | 8 8 | |
|--|--|--|
| Appendix B: Bandwidth requirements | 9 | |
| Appendix C: Troubleshooting guide Preliminary steps Local Transport requirements Debug interface Steps to perform LED troubleshooting Step 1 – Check the Power LED Step 2 – Check the LTE LED Step 3 – Check the WCDMA LED | 10 10 10 10 11 11 11 12 | |
| Step 4 – Check the GPS LED | 13 | |
| Warranty | 13 | |



Welcome

Thank you for your purchase of an AT&T MetroCell. You are on your way towards improving your location's in-building cellular coverage.

In addition to this 9962 User Guide, the following documentation is available to help you get the most out of this device:

- The AT&T MetroCell 9962 Installation Guide
- · The Requirements Guide

Customer responsibilities

The customer is responsible for the following:

- Providing an Ethernet router or switch with an available port. All customer equipment that will carry the MetroCell traffic must be configured as specified in Appendix A, Local Transport Requirements, including removing port blocking on specified ports.
- Providing Internet access and power. The required Internet bandwidth will depend on the number of simultaneous users and whether data-intensive applications are being used. 25 Mbps (downlink) is required for a single MetroCell (see Appendix B).
- Providing environmental operating conditions within the following ranges:

| Parameter | Value |
|-------------------|--------------------------------|
| Temperature range | 0°C to 50°C [32°F to 122°F] |
| Relative humidity | Up to 93% |

- Obtaining AT&T Premier usernames with administrative permissions for the individual(s) who will be expected to activate and manage the MetroCell.
- To create your login, go to <u>att.com/premier</u> and select Register now.
- Other responsibilities are specified in the AT&T MetroCell Terms and Conditions. For customers with AT&T Corporate Digital Advantage Program contracts, the MetroCell Terms and Conditions can be found at att.com/cda. Customers with AT&T Mobile Business Program contracts can find them at att com/amb. Others may find them at serviceguidenew.att.com or by consulting contracting resources within their organization or their AT&T account representative

Frequently asked questions

Q. How do I determine if AT&T MetroCell is right for my location?

A. If your business is located within an area in which AT&T is licensed to provide cellular service and your indoor signal strength is two bars or less, AT&T MetroCell may be a good solution for you. AT&T MetroCell model 9962 is designed for up to 96 (32 with 3G devices and 64 with LTE devices). AT&T MetroCell is up to 15,000 square feet per device, depending on building layout and construction.

Q. What changes will I notice to my mobile service once I install AT&T MetroCell?

 A. A call made through AT&T MetroCell will have improved signal strength, coverage, and clarity.

Q. What kind of handset will work with AT&T MetroCell?

 A. Any AT&T 3G, 4G, or 4G/LTE handset should work with AT&T MetroCell.

Q. What is an AT&T MetroCell Approved User List?

A. An Approved User List restricts use of the MetroCell to an authorized list of up to 1,500 AT&T wireless users (phone numbers) of the owner's choosing. Multiple (up to 3) MetroCells at the same location share a single Approved User List.

Q. What is Open mode?

A. Open mode is one of two AT&T MetroCell device modes of operation (the other being Closed mode). With Open mode, any AT&T wireless user within range of the AT&T MetroCell device can place calls or access data through it.

Q. What is Closed mode?

A. Closed mode is one of two AT&T MetroCell device modes of operation (the other being Open mode). With Closed mode, only AT&T wireless users specified on an Approved User List can use the AT&T MetroCell device.

Q. What is a Group?

A. When there are two or three AT&T MetroCells at the same address, they should be provisioned in a Group to be able to work together in handing off calls between them. The AT&T MetroCell Group shares the same Approved User List, and all devices in the Group must operate in the same mode (Open or Closed).



Getting started

There are two steps to get started with your MetroCell:

Install your MetroCell

Installation involves mounting the MetroCell on a wall or column near the ceiling, connecting it to your LAN, and providing power.

The AT&T MetroCell 9962 Installation Guide provides more complete instructions.

You can either do this yourself or order professional installation through your AT&T representative. There is an additional one-time charge for professional installation.

Activate your MetroCell

Activating your MetroCell involves registering it with the AT&T wireless network and establishing communication. These and other functions are performed on the MetroCell website: go to att.com/metrocell. Click Manage My MetroCell to authenticate and begin the process.

Detailed instructions on activation and other functions you can perform on the MetroCell website are described in the following pages.

Using the AT&T MetroCell website

The AT&T MetroCell website has a host of tools to help you manage your MetroCell, including such functions as:

- Viewing a listing of all the MetroCells you are authorized to manage
- Activating a MetroCell
- · Viewing the status of a MetroCell being activated
- · Deactivating or Replacing a MetroCell
- Managing device settings:
 - Updating registration data
 - Setting the MetroCell to operate in Open or Closed mode
 - Creating and editing an Approved User List
 - Viewing and downloading performance reports

The following pages describe these various functions in detail, grouped under the webpages on which they appear.

MetroCell Product page (att.com/metrocell)

The MetroCell Product page is found at the following URL: att.com/metrocell

This page provides access to a great deal of information on the AT&T MetroCell: what it is, its benefits, how to obtain one, and more. The product page can be accessed by anyone from the Internet.

Customers who have purchased a MetroCell may click on the <u>Manage my AT&T MetroCell</u> link to reach the portion of the website used to activate and manage their devices.



Authentication

The <u>Manage my AT&T MetroCell</u> portion of the website is restricted to users with AT&T Premier usernames for Telecom Managers or Billing Account Number (BAN) Administrators. All such users should have been assigned Premier Usernames which were sent to their business email address.

- If you know your Premier username and password, enter them where requested to navigate to the <u>Manage my</u> <u>AT&T MetroCell</u> detail page.
 - If you do not know your Premier username and password, follow the instructions on the screen to obtain them.
- After you click on "Manage my AT&T MetroCell" and enter your logon credentials, you will now be directed to the AT&T Premier site. Select "Other Admin Tools" at the top of the page and choose AT&T MetroCell to enter the AT&T MetroCell website.
 - If your account has migrated to myATT, contact your Account Representative to migrate back to Premier.

While any Premier username will enable you to view the <u>Manage my AT&T MetroCell</u>, several factors impact which (if any) MetroCells you can view and manage:

- When a MetroCell is purchased, it is associated with an AT&T Billing Account Number (or BAN). Several BANs may in turn be associated with a Foundation Account Number, or FAN
- Your Premier username is also associated with a BAN and possibly a FAN.

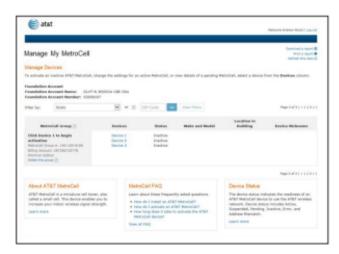


- A Premier username may be designated as a Telecom Manager (TCM) or BAN Administrator (also referred to as a BAN Admin). Only a TCM or BAN Admin can view MetroCells associated with the BAN.
- The BAN or FAN TCM can assign a number of privileges to Premier usernames, one of which is called "Administer AT&T MetroCell Access". Without this permission, a TCM or BAN Admin can create and edit an Approved User List for a MetroCell but cannot activate, deactivate, or otherwise manage the device. A user who has been granted the "Administer AT&T MetroCell Access" permission by the customer's TCM can perform all MetroCell management functions.

If you do not already have a Premier admin username and password, go to att.com/premier and select Register now.

Manage My MetroCell page

The Manage My MetroCell page is your entry to many tools which you can use to activate and manage your MetroCell.



The center of the page provides a summary listing of the MetroCells which you are authorized to view. These are MetroCells with BANs for which you are a TCM or BAN Admin. This may be none or one or multiple MetroCells.

MetroCell group

If more than one MetroCell is installed at the same address (a maximum of 3 is allowed), they will normally be provisioned in a Group. Multiple MetroCells in a Group can hand off calls to each other as a caller moves around the site.* In addition, all the MetroCells in a Group share a single Approved User List, which makes them easier to manage.

* An exception to this rule is the case where different models of AT&T MetroCells are installed in one site. In such a case, 3G and LTE MetroCells may not be able to hand off calls to each other. When applicable, the MetroCells listed on the Manage My MetroCell page are shown in their Groups.

Each Group is assigned a MetroCell Group Number, which looks like a telephone number. Any charges associated with your MetroCell will appear on your bill under this number.

The associated Billing Account Number (BAN) is shown under the MetroCell Group Number, as well as a notation that the group has Premium edition features. In particular, Premium edition, which is provided to all customers, includes the ability to operate the MetroCell in Open or Closed mode – discussed further below.

Filter List of MetroCells

If you are authorized to view more than one Group of MetroCells, they will initially be listed in the sequence of their Billing Account Number. If you are authorized to view many MetroCell groups, you can filter the list by state or ZIP code.

Before you activate any MetroCell in a particular group, the address of the group is not shown on the Manage My MetroCell page. Instead, the group is listed under the caption: "Click Device 1 to begin activation".

Acting on a MetroCell

To perform some action on a particular MetroCell, click on "Device 1" or "Device 2" or "Device 3" in the Devices column. The next step depends on the status of the device you select:

- If the device status is "Inactive", you will be taken to the Activation flow, but only if your Premier username has the "Administer AT&T MetroCell Access" permission. The Activation flow is described below.
- If the device status is "Pending", you will be taken to the Activation in Progress page. This page confirms that activation is still in progress and summarizes the information entered during the activation process. You can take the following actions from this page:
 - Go to the Approved User List page
 - View summary information on other MetroCells in the Group
 - Print the page
 - Go back to the Manage My MetroCell page (click on View All Devices)
- If the device status is "Active", you will be taken to the Manage Device Settings page, but only if your Premier username has the "Administer AT&T MetroCell Access" permission. This page is described below.
- If the device status is "Error", an error was encountered during activation. Please call AT&T Customer Care at 877 996 7017 and, when prompted, enter PIN 63876 (METRO).
- If the device status is "Suspended", the Billing Account has been placed in Suspended status. Please call AT&T Customer Care at 877 996 7017 and, when prompted, enter PIN 63876 (METRO).



Activation

When an authorized user selects an Inactive device on the Manage My MetroCell page, the activation flow is launched. The key steps in this process are outlined below.

Terms and conditions

The terms and conditions which govern use of the MetroCell are incorporated into a contract which your organization must have accepted in order to obtain an AT&T MetroCell. The first step in the activation flow is for the user to acknowledge that those terms and conditions apply. A link is provided to download a copy of these terms.



The user must click on the checkbox and then on "Continue".

E911 address

The next step in activating a MetroCell is to enter the address at which the MetroCell has been installed. Entering this address accurately is extremely important, since it is used to dispatch emergency responders in the event a 911 call is placed through the MetroCell. If the MetroCell is located in a building that is part of a larger campus or office park, be sure to include a building identifier when entering the address.

The address you enter will be screened to ensure it is a valid address for Enhanced 911 dispatching purposes. If it is determined not to be valid, you will have the opportunity to correct it.

If you have already entered the address for another device in the same Group, you will be asked to check the address previously entered and confirm that it is the correct address for the current MetroCell. If it is not, you will be directed to call your AT&T account representative to have it corrected. This is the only way the correct address will be sent to emergency responders in the event of a 911 call.



Additional registration information

After completing the address entries, you will be asked to enter additional information:

- Serial number of the MetroCell (18 alphanumeric characters for a 9962), found on the device label or shipping label
- An easy-to-remember "nickname" that you assign (this is optional)
- Location of the device in the building, such as floor, room number, etc.
- Selection of Open or Closed mode
- Name, email address, and phone number for a technical contact, used in case AT&T needs to communicate with someone familiar with and responsible for managing the MetroCell
- Name of your Internet Service Provider, which may be useful in troubleshooting any operational problem that may arise.

Completing activation

Finally, you will be asked to double check all the information you have entered and click the Activate button. This will take you to the Activation in Progress page.

It may take up to 2 hours for the MetroCell to complete activation, which includes registering the device and incorporating it into the AT&T Mobility network, downloading the latest MetroCell software, and configuring both the MetroCell and the network. At the end of this process, the status of this device will be updated to Active, and the technical contact will receive an email confirming activation.

During this time, you can go back to the Manage My MetroCell page to work on other MetroCells, or if the device will be in Closed mode, work on the Approved User List, or simply check back in later. Your online session may time out after a period of inactivity, but the activation process will continue.



MetroCell Device Settings page

Once a MetroCell has been activated, various characteristics can be viewed and updated on the MetroCell Device Settings page. To get to it, select an active device on the Manage My MetroCell page. Items you can edit include:

- · Device nickname
- Location in building
- Open or Closed mode
- · Technical contact information
- Internet Service Provider

There are also several fields you can view but not edit. Changing any of these fields requires that you contact your AT&T representative:

- Device address
- Serial number
- Make & model

In addition to viewing and editing device settings, links across the top of the page provide access to several other features:

Move device

This link will guide you through the steps required to move your MetroCell to a new location.

Replace

This link will enable you to replace the selected MetroCell with a new one – either the same model as the current one or an upgrade from a 9363 to a 9962. All the settings will be carried over from the current device to the new one.

Deactivate

This link will enable you to deactivate your MetroCell.

· Performance Report

This link will enable you to view a performance report on the elected device.

Approved User List

This is where you create and manage an Approved User List – see below.

· Devices in group

If you have more than one MetroCell at the current location, this link will provide information on the other devices in the same Group as the MetroCell you are working with.



Approved User List

The Approved User List page enables you to create and manage an Approved User List. If the MetroCell has been set to operate in Closed mode, only users included in the Approved User List can make calls or run data apps through the MetroCell. Note that all MetroCells in a Group (usually all MetroCells at the same address) share a single Approved User List.

25 entries can be viewed at a time. Each entry consists of an AT&T wireless phone number and an optional name of the wireless user. There is a link at the bottom of the list to Add More Users, which opens an additional page. An Approved User List can hold up to 1500 entries.

The Approved User List can be keyed in manually or imported from any of several sources:

- "Import from foundation or billing account number (FAN or BAN)" copies all the wireless numbers on an account into the List.
- "Import from MetroCell Group copies the Approved User List from another group which the user is authorized to access."
- "Import from external file" copies numbers from an external xls or csv formatted file.

If there are more than 1500 numbers in the FAN, BAN, or external file, only the first 1500 are taken.

After keying in or importing the numbers and clicking Submit, the numbers will all be validated. If errors are detected, the entries with errors will be moved to the top of the list, highlighted in red, and error messages will be displayed. These errors should be corrected or the corresponding entries removed and the list resubmitted. When no errors remain, the corrected list is displayed and can be edited further.



Validation includes:

- · A check for duplicates
- A check for a complete number (10 digits)
- Confirmation that the telephone number is for an AT&T wireless subscriber
- Confirmation that the telephone number is an active number

Remember to save your list by clicking on Submit before you leave the page.

To start over, there is an option at the bottom of the list to delete the entire list. You will be asked to confirm this deletion, which is not recoverable.

To download or print the list of users on any page, click on the "Download a copy or Print this page" link in the upper right corner of the page.

Please note: It may be necessary for users who are placed on the Approved User List to power their handset down and back up to be able to access the MetroCell.



Appendix A: Local transport requirements

Confirm the following router/switch settings prior to activating your AT&T MetroCell:

1. DHCP IS ON

[Note: For installations where static assignment of an IP address is desired the use of MAC Binding and static DHCP Reservation is suggested. Static IP is not supported]

- 2. MTU size is set to 1492 or higher
- MAC address filtering is either turned off or allows the MAC address of the MetroCell
- 4. IPSec Pass-Through is Enabled
- 5. Block Fragmented Packets is Disabled

If using multiple routers, the MetroCell must be connected to the first router connected to the broadband modern.

If the MetroCell is connected to a router that is connected to a modem and both the router and the modem have NAT

(Network Address Translation) enabled, disable NAT either in the router or in the modern.

Because of the wide variety of network configurations, AT&T recommends consultation with a network specialist, router manufacturer, and/or Internet Service Provider to answer specific network setup questions.

TCP/UDP Ports

The following ports need to be Open for inbound and outbound connections:

- UDP Ports 123, 500, 4500, 33434, 33435, 33436
- TCP Ports 443, 7004, 7014

IP Address Pass-Through

If the local network has a firewall with specific IP addresses allowed to pass through, traffic to and from the following addresses must be allowed to pass:



| Fully Qualified Doman Name (FQDN) | IP Address | Port | |
|---|-------------------|---|--|
| bootstrap-ipsecrouter1.metro.wireless.att.com | 12.230.211.36 | udp 500, 4500, 33434 thru 33450 | |
| | 107.122.134.64/26 | (Content in BOLD is new and must be permitted on | |
| | 166.194.142.64/26 | networks with custom firewalls) | |
| | 12.230.211.12 | udp 500, 4500 | |
| initial-ipsecrouter.metro.wireless.att.com | 107.122.134.64/26 | (Content in BOLD is new and must be permitted on | |
| | 166.194.142.64/26 | networks with custom firewalls) | |
| fileserver.metro.wireless.att.com | 166.147.105.25 | tcp 443, tcp 7014 | |
| hnm.metro.wireless.att.com | 166.147.105.25 | tcp 443, tcp 7004 | |
| N/A | 12.230.208.133 | | |
| N/A | 12.230.209.5 | | |
| N/A | 12.230.208.48 | udp 123 | |
| N/A | 12.230.209.133 | (Content in BOLD is new and must be permitted on | |
| N/A | 216.239.35.8 | networks with custom firewalls) | |
| N/A | 216.239.35.12 | netrons mareasem menansy | |
| N/A | 129.134.25.123 | | |
| N/A | 17.253.4.125 | | |
| alumsmci-crtn-oam.metro.wireless.att.com | 12.230.211.4 | | |
| alumsmci-crtn-4gb.metro.wireless.att.com | 12.230.211.44 | | |
| alumsmci-hzwd-oam.metro.wireless.att.com | 12.230.211.68 | | |
| alumsmci-hzwd-4gb.metro.wireless.att.com | 12.230.211.76 | | |
| alumsmci-clmb-oam.metro.wireless.att.com | 12.230.210.196 | | |
| alumsmci-clmb-4gb.metro.wireless.att.com | 12.230.210.204 | | |
| alumsmci-rcpk-oam.metro.wireless.att.com | 12.230.210.132 | | |
| alumsmci-rcpk-4gb.metro.wireless.att.com | 12.230.210.140 | 11dp E00 4E00 22424 2242E 2242E | |
| alumsmci-dctr-oam.metro.wireless.att.com | 12.230.210.4 | udp 500, 4500, 33434, 33435, 33436 | |
| alumsmci-dctr-4gb.metro.wireless.att.com | 12.230.210.36 | | |
| alumsmci-lkmr-oam.metro.wireless.att.com | 12.230.210.68 | | |
| alumsmci-lkmr-4gb.metro.wireless.att.com | 12.230.210.100 | | |
| alumsmci-snap-oam.metro.wireless.att.com | 12.230.211.196 | | |
| alumsmci-snap-4gb.metro.wireless.att.com | 12.230.211.204 | | |
| alumsmci-sntd-oam.metro.wireless.att.com | 12.230.211.132 | | |
| alumsmci-sntd-4gb.metro.wireless.att.com | 12.230.211.140 | | |



| | | _ |
|---------------------------------------|-------------------|---|
| Fully Qualified Doman Name (FQDN) | IP Address | Port |
| msmci-all4-oam.metro.wireless.att.com | 107.122.134.64/26 | |
| msmci-all4-4gb.metro.wireless.att.com | 101.122.134.04/20 | |
| msmci-atl3-oam.metro.wireless.att.com | 107.122.135.64/26 | |
| msmci-atl3-4gb.metro.wireless.att.com | 101.122.155.04/20 | |
| msmci-brp1-oam.metro.wireless.att.com | 166.192.80.64/26 | |
| msmci-brp1-4gb.metro.wireless.att.com | 100.192.60.04/20 | |
| msmci-chg3-oam.metro.wireless.att.com | 166.198.57.64/26 | |
| msmci-chg3-4gb.metro.wireless.att.com | 100.130.31.04/20 | udp 500, 4500 (Content in BOLD is new and must be permitted on |
| msmci-lsa4-oam.metro.wireless.att.com | 107.122.136.64/26 | |
| msmci-lsa4-4gb.metro.wireless.att.com | 101.122.130.04/20 | networks with custom firewalls) |
| msmci-scr1-oam.metro.wireless.att.com | 166.190.21.64/26 | |
| msmci-scr1-4gb.metro.wireless.att.com | 100.130.21.04/20 | |
| msmci-wah2-oam.metro.wireless.att.com | | |
| msmci-wah2-4gb.metro.wireless.att.com | 166.198.59.64/26 | |
| msmci-wnd4-oam.metro.wireless.att.com | 166 100 50 64/26 | |
| msmci-wnd4-4gb.metro.wireless.att.com | 166.198.58.64/26 | |

In the event that a MetroCell does not successfully activate, it may be useful to perform a packet trace of the messaging between the MetroCell and the AT&T network to aid in troubleshooting

Appendix B: Bandwidth requirements

Customer is responsible for providing connectivity to the Internet.

The maximum total traffic that can be carried by a MetroCell 9962 across all simultaneous users, based on its radio interface, is up to 100 Mbps. Lesser Internet access bandwidth may limit overall throughput

The following table shows the minimum bandwidth required for the MetroCell 9962 to operate properly, depending on whether there is 1 or 2 or 3 MetroCells sharing the same access circuit:

| Number of MetroCells Supported | Minimum Downlink Bandwidth | Minimum Uplink Bandwidth |
|--------------------------------------|----------------------------------|--------------------------------|
| 1 | 25 Mbps | 5 Mbps |
| 2 | 30 Mbps | 7 Mbps |
| 3 | 35 Mbps | 9 Mbps |



Appendix C: Troubleshooting guide

If you are not able to make a voice call or use data applications, follow the troubleshooting steps in this appendix.

If you have multiple small cells at the same site and are experiencing poor voice quality, slow data speeds, or dropped calls, the cause may be interference between the cells. It may be necessary to increase the separation between cells or otherwise shield the cells from each other. If you are experiencing poor voice quality, check that the recommended Internet access bandwidth is provided and available.

Preliminary steps

- Power down the MetroCell and wait 10 minutes.
- Power up the MetroCell and wait at least 15 minutes.
- Ensure that an appropriate mobile device is available.
- If the MetroCell has been configured to operate in "Closed" mode, either change to Open mode or ensure that any device being used to make test calls is on the Approved User List.
- Check that an Internet router is installed and working properly.
- Ensure that administrative access to the router and MetroCell is available.

Local Transport requirements

Verify that the Local Transport Requirements in Appendix A are met. This may require adjustment of certain router parameters.

Debug interface

Four LED indicator lights are visible on the front face of the MetroCell. LEDs provide status indication for:

- Power
- LTE
- · WCDMA (also known as 3G)
- GPS

These LEDs can be used to help diagnose problems – see the troubleshooting steps below.

The LEDs can take these states:

- Off
- · Flashing green
- Solid green
- Flashing red
- Solid red
- Toggling between red and green





Steps to perform LED troubleshooting

Perform the actions outlined below. In the event that a fault is indicated which cannot be corrected, please call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO).

Step 1 - Check the Power LED

The Power LED indicates the overall state of the MetroCell. Specific states are described in the following table:

| Power LED | Other LEDs | Explanation | Action |
|--------------|------------|--|--|
| Off | Off | All LEDs are off when there is no power to the MetroCell. All LEDs are also turned off after 15 minutes of normal operation. | Check the number of "bars" on a handset within range to see if the MetroCell is working. Check that power is being delivered to the MetroCell. Reset or power cycle the MetroCell. |
| Red | Off | A hardware fault has been detected which prevents service from being provided. | Check that the ambient temperature is within the stated operating range. |
| Red | On | A hardware fault has been detected which is degrading service. | Call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). |
| Flashing Red | Off | Device has not connected to the AT&T Network. | Review all local transport requirements in Appendix A. |
| Green | | | Continue to Step 2. |

Step 2 - Check the LTE LED

The LTE LED indicates whether the MetroCell is configured to provide LTE service and whether any faults have been detected. Specific states are described in the following table:

| LTE LED | Explanation | Action |
|-----------------------|--|--|
| Off | All LEDs are off when there is no power to the MetroCell. All LEDs are also turned off after 15 minutes of normal operation. | Check the number of "bars" on a handset within range to see if the MetroCell is working. Check that power is being delivered to the MetroCell. Reset or power cycle the MetroCell. |
| Red | MetroCell is booting up or restarting. If red at other times, LTE configuration or operational failure. | 1. Check Network Cables 2. Check Local Transport Requirements 3. Power cycle the MetroCell 4. Call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). |
| Flashing Green | LTE is blocked. | May clear itself. If this state persists, call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). |
| Toggling Red/Green | System is initializing. | |
| Flashing Red | Location check has failed. | Reset or power cycle the MetroCell. Verify the address that was entered on the website. Call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). |
| Green | Ready for service. | |



Step 3 - Check the WCDMA LED

The WCDMA LED indicates whether the MetroCell is configured to provide 3G (UMTS and HSPA+) service and whether any faults have been detected. Specific states are described in the following table:

| WCDMA LED | Explanation | Action |
|-----------------------|---|--|
| Off | All LEDs are off when there is no power to the MetroCell. All LEDs are also turned off after 15 minutes of normal operation. | Check the number of "bars" on a handset within range to see if the MetroCell is working. Check that power is being delivered to the MetroCell. Reset or power cycle the MetroCell. |
| Red | MetroCell is booting up or restarting. If red at other times, 3G configuration or operational failure. | 1. Check Network Cables 2. Check Local Transport Requirements 3. Power cycle the MetroCell 4. Call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). |
| Flashing Green | 3G service is blocked. | May clear itself. If this state persists, call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). |
| Toggling Red/Green | System is initializing. | |
| Flashing Red | Location check has failed. | Reset or power cycle the MetroCell. Verify the address that was entered on the website. Call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). |
| Green | Ready for service. | |



Step 4 - Check the GPS LED

The GPS LED indicates the status of the MetroCell's GPS systems and whether any faults have been detected. Specific states are described in the following table:

| GPS LED | Explanation | Action |
|-------------------|---|---|
| Off | All LEDs are off when there is no power to the MetroCell. All LEDs are also turned off after 15 minutes of normal operation. Turns off after location check has completed. | Check the number of "bars" on a handset within range to see if the MetroCell is working. Check that power is being delivered to the MetroCell. |
| Red | MetroCell is booting up or restarting. If red at other times, GPS hardware or software failure. | 1. Check Network Cables 2. Check Local Transport Requirements 3. Power cycle the MetroCell 4. Call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). |
| Flashing Red | Seeking GPS signal. | If persists but the 3 other LEDs are solid green, then location has been verified by other means and this LED can be disregarded. If the other LEDs are not solid green and you have waited 2 hours, check condition and placement of the GPS antenna. Reset or power cycle the MetroCell. |
| Flashing Green | The GPS signal has been lost. | Check condition and placement of the GPS antenna. Reset or power cycle the MetroCell. |
| Green | A GPS signal has been acquired. | |

If you are still unable to complete calls and use data applications, please call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO).

Warranty

One-Year Limited Warranty AT&T warrants to the first retail purchaser of an AT&T MetroCell device that, should this product or any part be proved defective in materials or workmanship, from date of purchase, as evidenced by AT&T billing records for a period of one (1) year, then it will be subject to the terms of this one-year limited warranty. Such defects will be repaired or replaced without charge for parts or labor directly related to the defect.

Limitations And Exclusions: This warranty does not apply to any cost incurred for removal or reinstallation, or to any product or part thereof which has suffered through normal wear and tear, alteration, improper installation, physical abuse, misuse, neglect or accident. Damage resulting from an act of God, including but not limited to fire, flood, earthquake and other natural disasters will be excluded. This limited warranty is in lieu of all other warranties, express or implied either in fact or by operations of law, statutory or otherwise, including, but not limited to, any implied warranty of merchantability or fitness for a particular use. AT&T does not authorize any other

person to assume any liability beyond the warranty herein described. In no event, whether based in contract, tort or any other legal theory, shall AT&T or any of its agents or sellers be liable for incidental, consequential, indirect, special, or punitive damages of any kind resulting from the use of this product, including but not limited to interrupted or incomplete phone calls, omission or negligence arising out of any breach of this warranty. In no event shall AT&T or its agents or sellers be liable for any damages however defined in an amount in excess of the purchase price.

Customers who believe they require warranty service should call AT&T Customer Care at 877-996-7017 and, when prompted, enter PIN 63876 (METRO). A Customer Care representative will take information over the phone to attempt to diagnose and remedy the issue. If the Customer Care representative determines that warranty service is required, the representative will provide instructions on how to return the device for repair or replacement.

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