# Mobile Link<sup>®</sup> Wi-Fi<sup>®</sup> Remote Monitoring Installation and User Manual





#### **AWARNING**

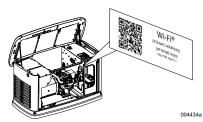
Loss of life. This product is not intended to be used in a critical life support application. Failure to adhere to this warning could result in death or serious injury. (000209b)

Online Technical Support: support.mobilelinkgen.com

MobileLink: mobilelinkgen.com 855-436-8439—United States 844-843-9436—Canada

Generator Model:	
Generator Serial:	
Media Access Control (MAC) Address	
Service Set Identifier (SSID)	

Data labels for the generator and Wi-Fi are located on the engine divider panel. Record the data label information on this page.



Data Label Location

Always supply the complete model and serial numbers of the unit when contacting an Independent Authorized Service Dealer (IASD) about parts and service.

Operation and Maintenance: Correct maintenance and care of the unit ensures a minimum number of problems, and keeps operating expenses at a minimum. It is the operator's responsibility to perform all safety inspections, to verify all maintenance for safe operation is performed promptly, and to have the equipment inspected periodically by an IASD. Normal maintenance, service, and replacement of parts are the responsibility of the owner/operator and are not considered defects in materials or workmanship within the terms of the warranty. Individual operating habits and usage may contribute to the need for additional maintenance or service.

When the unit requires servicing or repairs, Mobile Link recommends contacting an IASD for assistance. Authorized service technicians are factory-trained and are capable of handling all service needs.



# **Table of Contents**

Section 1: Safety Rules Introduction Read This Manual Thoroughly Safety Rules General Safety Hazards Electrical Hazards Explosion Hazards	1 1 2
Section 2: General Information	7
and Setup Introduction Glossary Description Wi-Fi Network Usage Wi-Fi Network Infrastructure Limitations Wi-Fi Network Signal Strength Firmware Updates Wi-Fi Specifications FCC Statement	3 3 3 3 4 4 4 4
Section 3: Setup and Operatio	
	n
Pre-Installation Signal Strength Test	5 5 5 6 6 6 6 6 7 7 8

Section 4: Troubleshooting	
General Troubleshooting	10
IASD Troubleshooting	10

Section 5: Terms and Acronyms

# Section 1: Safety Rules

#### Introduction

Thank you for purchasing this home standby generator product accessory.

The information in this manual is accurate based on products produced at the time of publication. The manufacturer reserves the right to make technical updates, corrections, and product revisions at any time without notice.

# Read This Manual Thoroughly



# **AWARNING**

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury. (000100a)

If any section of this manual is not understood, contact Mobile Link<sup>®</sup> customer support at 1-855-436-8439 (CAN 844-843-9436) or visit **www.mobilelinkgen.com** for starting, operating, and servicing procedures. The owner is responsible for correct maintenance and safe use of the unit.

SAVE THESE INSTRUCTIONS for future reference. This manual contains important instructions which must be followed during placement, operation, and maintenance of the unit and its components. Always supply this manual to any individual that will use this unit.

# Safety Rules

The manufacturer cannot anticipate every possible circumstance that might involve a hazard. The alerts in this manual, and on tags and decals affixed to the unit, are not all inclusive. If using a procedure, work method, or operating technique that the manufacturer does not specifically recommend, verify that it is safe for others and does not render the equipment unsafe.

Throughout this publication, and on tags and decals affixed to the unit, DANGER, WARN-ING, CAUTION, and NOTE blocks are used to alert personnel to special instructions about a particular operation that may be hazardous if performed incorrectly or carelessly. Observe them carefully. Alert definitions are as follows:

# **A** DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

(000001)

#### **AWARNING**

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

(000002)

## **ACAUTION**

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

(000003)

**NOTE:** Notes contain additional information important to a procedure and will be found within the regular text of this manual.

These safety alerts cannot eliminate the hazards that they indicate. Common sense and strict compliance with the special instructions while performing the action or service are essential to preventing accidents.

# **General Safety Hazards**



## **▲** DANGER

Electrocution. High voltage is present at transfer switch and terminals. Contact with live terminals will result in death or serious injury.

(000129)

#### **AWARNING**

Accidental Start-up. Disconnect the negative battery cable, then the positive battery cable when working on unit. Failure to do so could result in death or serious injury.

#### WARNING

Risk of injury. Do not operate or service this machine if not fully alert. Fatigue can impair the ability to operate or service this equipment and could result in death or serious injury. (000215a)

# **AWARNING**

Injury and equipment damage. Do not use generator as a step. Doing so could result in falling, damaged parts, unsafe equipment operation, and could result in death or serious injury. (000216)



#### **AWARNING**

Electrocution. Potentially lethal voltages are generated by this equipment. Render the equipment safe before attempting repairs or maintenance. Failure to do so could result in death or serious injury.

(000187)

 For safety reasons, the manufacturer requires this equipment be installed by an IASD or other competent, qualified electrician or installation technician who is familiar with applicable codes, standards and regulations. The operator also must comply with all such codes, standards, and regulations.

**NOTE:** Follow the shutdown procedure described in the generator owner's manual before performing any work on or near the generator.

Remove the control panel fuse and disconnect the black (–) battery cable to prevent accidental startup. When disconnecting battery cables, always remove the black (–) cable first, then remove the red (+) cable. When reconnecting the cables, connect the red (+) cable first, and then black (–) cable.

## **Electrical Hazards**



#### **A** DANGER

Electrocution. Contact with bare wires, terminals, and connections while generator is running will result in death or serious injury.

(000144)



# **A** DANGER

Electrocution. Do not wear jewelry while working on this equipment. Doing so will result in death or serious injury.

(000188)



#### **A DANGER**

Electrocution. Water contact with a power source, if not avoided, will result in death or serious injury.

(000104)

#### **A** DANGER

Automatic start-up. Disconnect utility power and render unit inoperable before working on unit. Failure to do so will result in death or serious injury.

(000191)



### **A** DANGER

Electrocution. In the event of electrical accident, immediately shut power OFF. Use non-conductive implements to free vicitim from live conductor. Apply first aid and get medical help. Failure to do so will result in death or serious injury. (00014;



#### **▲**WARNING

Moving Parts. Do not wear jewelry when starting or operating this product. Wearing jewelry while starting or operating this product could result in death or serious injury. (000115)

The generator may crank and start at any time when utility is lost. When this occurs, load circuits are transferred to the STANDBY (generator) power source. Before working on this generator (for inspection, service or mainte-

nance), to prevent possible injury, always set the generator to OFF and remove the 7.5A fuse from the generator control panel.

 Verify all appropriate covers, guards and barriers are in place, secured and/or locked before operating the generator. If work must be done around an operating unit, stand on an insulated, dry surface to reduce potential shock hazard.

# **Explosion Hazards**



#### **A** DANGER

Explosion and fire. Fuel and vapors are extremely flammable and explosive. No leakage of fuel is permitted. Keep fire and spark away. Failure to do so will result in death or serious injury.



#### **A DANGER**

Explosion and Fire. Fuel and vapors are extremely flammable and explosive. Store fuel in a well ventilated area. Keep fire and spark away. Failure to do so will result in death or serious injury.

(000143)



#### WARNING

Explosion and fire risk. Do not smoke near unit. Keep fire and spark away. Failure to do so could result in death, serious injury, or property or equipment damage.

(000282)

- Verify no combustible materials are left in the generator compartment or on or near the generator as FIRE or EXPLOSION may result. Keep the area surrounding the generator clean and free from debris.
- Fuels, such as natural gas (NG) and liquid propane (LP) gas, are extremely EXPLO-SIVE. Install the fuel supply system according to applicable fuel-gas codes. Before placing the home standby electric system into service, fuel system lines must be properly purged and leak tested according to applicable code. Inspect the fuel system periodically for leaks. No leakage can be permitted.

# Section 2: General Information and Setup

#### Introduction

This section of the manual describes the features and controls of the Wi-Fi® module and system. Every effort was made to verify the information and instructions in this manual were both accurate and current at the time the manual was written. However, the manufacturer reserves the right to change, alter, or otherwise improve this product or manual at any time without prior notice.

**NOTE:** Wi-Fi<sup>®</sup> is a registered trademark of Wi-Fi Alliance<sup>®</sup>.

# **Glossary**

The back of this manual contains a glossary of *Terms and Acronyms* associated with Wi-Fi enabled modules and controllers.

# Description

The Wi-Fi module is mounted on the back of the generator and communicates with the generator's controller through a wiring harness. Generator status and operating information is periodically transmitted over the generator owner's private Wi-Fi network. This enables the generator owner to monitor generator status from anywhere he or she has Internet access. Controller updates are automatically downloaded and installed from Mobile Link's file server.

Automatic standby generators require activation in order to operate automatically. This one-time process also serves as the product registration. For activation instructions, refer to the Installation Manual provided with the unit.

The owner may also choose to set up an optional account on *app.mobilelinkgen.com*. An active Mobile Link subscription enables the owner to log onto the website to check on the current status of the generator at any time. This also enables the system to notify the owner of any change in operating status. With a valid subscription, the owner can be contacted by e-mail, push notifications, or text messages if alarms or warnings occur. The delivery method and frequency of some alerts can be adjusted on the website and mobile app.

# Wi-Fi Network Usage

The installed and activated Wi-Fi module maintains a connection to the private Wi-Fi network. Operating data, including certain customer information, will be shared between the generator and Mobile Link. By using Mobile Link, you agree to collection and use of this data subject to Mobile Link's privacy policy located at <a href="https://www.generac.com/privacy-policy">https://www.generac.com/privacy-policy</a>.

While every effort has been made to protect user data, all networks are susceptible to external attacks. Mobile Link cannot guarantee absolute security as a result. Mobile Link is not aware of or responsible for the level of network security provided by the network owner. Also, Mobile Link accepts no liability for external attacks.

IMPORTANT NOTE: As with any Wi-Fi device, it is imperative to take all necessary measures to secure the connection and avoid security breaches and theft of personal data. Such security measures are the customer's responsibility.

Operating data transmitted over the Wi-Fi network may be counted towards monthly Internet service plan limits. The Wi-Fi network owner is responsible for monitoring data usage after the Wi-Fi module is installed and activated

# Wi-Fi Network Infrastructure Limitations

All communication systems have benefits and limitations based on consistency, cost, number of nodes, and additional factors. Consistent Wi-Fi communication will vary depending on the reliability and response time of your Internet Service Provider (ISP) under normal operating conditions and during a storm or utility outage. In addition, the type of network equipment you own, and the way it is configured, can also affect the generator's ability to communicate via Mobile Link Wi-Fi.

As an alternative, Mobile Link Cellular communication is available as an accessory. Contact your IASD, or visit *app.mobilelink-gen.com* for more information.

**NOTE:** Installing Mobile Link Cellular requires disabling Wi-Fi.

# Wi-Fi Network Signal Strength

If the home Wi-Fi signal strength is insufficient for communicating with the generator, a wireless repeater (signal booster) can be installed in the home. Wireless repeaters may be purchased from any local computer or electronics retailer.

# Firmware Updates

Occasional updates may be released for the generator controller operating system (firmware). Once installed and activated, the Wi-Fi module enables automatic reception of firmware updates as sent directly from the manufacturer.

# Wi-Fi Specifications

Specification	Value
Networking standard	IEEE 802.11.b/g/n
Transceiver	RS485
Module operating power	5 VDC
Cable	RS485
Supply voltage	Nominal: 5 VDC
(V+ to GND)	Minimum: 4.3 VDC
	Maximum: 6.2 VDC
RS-485 charge spike rejection (either A or B); line idle	Minimum 1.5 nC
ETL Listing Number	FTPM/E359637
FCC ID	See Wi-Fi label on
IC Certification	engine divider panel.

## **FCC Statement**

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try

to correct the interference by one or more of the following measures:

- Reposition or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

**NOTE:** Changes or modifications made to this equipment not expressly approved by the manufacturer may void the FCC authorization to operate this equipment.

# Section 3: Setup and Operation

The Wi-Fi module is provided as standard equipment.

Before the generator is delivered to the installation site, perform the *Pre-Installation Signal Strength Test* to determine if the existing Wi-Fi signal is sufficient for use or if it must be boosted.

# Pre-Installation Signal Strength Test

**NOTE:** Most network routers automatically broadcast their Wi-Fi network name every few seconds. Network owners may choose to disable broadcasting, making the home network invisible.

Proceed as follows to test signal strength:

 See Figure 3-1. Position a mobile device in the proposed generator installation location.

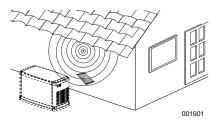


Figure 3-1. Test Wi-Fi Signal Strength

- 2. Set up a mobile device (smartphone, tablet, or laptop) to detect Wi-Fi networks.
- See Figure 3-2. Verify home Wi-Fi network is being detected by the mobile device. Observe the Wi-Fi signal strength.



Figure 3-2. Signal Strength Display

- If Wi-Fi signal is strong (B), the existing network setup is acceptable. The Wi-Fi module will operate from its location on the generator.
- If Wi-Fi signal is weak (C) or fluctuating, or the network is not available, the homeowner may need to consider upgrading their wireless router. Any signal boosters present in the system (e.g. a repeater)

- should also be tested and upgraded if necessary.
- If Wi-Fi signal is weak and network cannot be upgraded, the homeowner should consider using the cellular based Mobile Link accessory.

#### Connect to Home Network

Successful connection to the home network must occur before the user can access any of the features in the Mobile Link application. and communicate with the Mobile Link servers.

#### NOTES:

- The connection process requires the installer (or user) to be comfortable navigating various menus and functions on the generator controller. See Owner's Manual for instructions on operating the keypad.
- A Wi-Fi Menu Map is provided at the end of this section for reference.

#### **Before Starting**

Verify the generator is registered and activated. To activate the generator, visit www.activategen.com and follow the prompts as directed.

# **Router Requirements**

Verify home network is provided using a router meeting the criteria listed below prior to attempting a connection:

- · 2.4 GHz frequency range
- 802.11b, 802.11g, and 802.11n wireless protocols
- Open communication on ports 80 and 443 (open by default on most networks)

NOTE: Listed router requirement information indicates minimum hardware requirements necessary to establish and maintain a Wi-Fi connection the generator. Some routers may include additional functionality which may restrict communications. Contact router manufacturer for specific information when verifying additional features and functionality impact to communication.

**NOTE:** Wireless networks with 5.0 GHz frequency range and/or 802.11a, and 802.11ac wireless protocols are not supported. However, networks with both 2.4 GHz and 5.0 GHz frequency options can be used. 5.0 GHz networks will not appear as selectable options when attempting to connect.

# Wi-Fi Extender Implementation

A wireless network extender, or Wi-Fi booster, may be used for networks deemed to weak or unreliable during pre-installation tests or after initial connection.

Select a mounting location for the wireless network extender which is equidistant from the generator and home network Wi-Fi router. Placing the wireless network extender closer to either device will not improve Wi-Fi performance.

**NOTE:** See wireless network extender documentation for specific instructions on placing the wireless network extender.

# **Connection Alternatives**

Alternative connection options are available to promote a connection between the generator and Wi-Fi module. Accessory devices can be attached to the generator after installation.

# **Accessory Device Options**

- Mobile Link Cellular 4G LTE Accessory (Model 7169): This device is easy to use and works with Verizon® for broad coverage and more reliable connections. The 4G LTE network delivers fast download speeds, allowing automatic generator system upgrades over the air, and fast delivery of generator condition notifications. Pairs with the Mobile Link monitoring service, giving users and dealer partners 24/7 frontline access to critical information about generator status for enhanced peace-ofmind.
- Mobile Link Wi-Fi/Ethernet Accessory (Mobel 7170): Designed specifically for use with local Wi-Fi or Ethernet networks, this accessory is easy to use and offers broad coverage and reliable connections. Delivers fast download speeds, enabling automatic generator system upgrades over the air, and fast delivery of generator condition notifications. Pairs with the Mobile Link monitoring service, giving users and dealer partners 24/7 front-line access to critical information about generator status for enhanced peace-of-mind.

# Connecting To and Monitoring With Mobile Link

# Download Mobile Link and Complete Registration

Proceed as follows to complete Wi-Fi installation:

- 1. Go to app.mobilelinkgen.com.
- Follow the on-screen prompts to create a Mobile Link account.
- 3. Enter generator serial number to associate the unit with the Mobile Link account.
- 4. Choose a service plan level.
- Download the free Mobile Link application (app) from either of the following providers:



Figure 3-3. Mobile Link App Providers

6. Launch the app, complete the online form, and click "Sign Up."

# Monitoring Generator with Mobile Link

Mobile Link allows generator owners to access information such as operating status, maintenance schedule, exercise schedule, and more. Follow in-app prompts for instructions.

# Establishing a Dealer Relationship

Mobile Link allows generator owners to connect a unit to a desired IASD. Users can search for an IASD, and access their information such as name, address, and phone number. Once connected, the IASD may also monitor generator information remotely.

**NOTE:** Remote monitoring by an IASD available at participating dealers only. Typically requires ongoing service or maintenance agreement packages.

#### **Unsuccessful Network Connection**

See *Figure 3-4*. If the connection attempt fails, the controller displays "Setup Failed...Retry?"

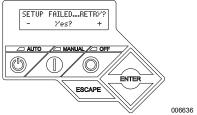


Figure 3-4. Wi-Fi Setup Failure Screen

Proceed to **Retry Network Connection** if either condition exists

# **Retry Network Connection**

See *Figure 3-5*. Wi-Fi network connection may fail if incorrect information is entered during setup, such as a wrong network SSID or password. If "Setup Failed" displays on the controller, press "Yes" and follow the Wi-Fi setup process from the beginning.

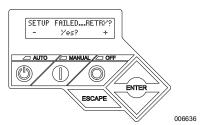


Figure 3-5. Wi-Fi Setup Failure

#### Reconnection

Reconnection to Wi-Fi will be required if there are any changes to the homeowner's network; for example, a new router or ISP, a new password, etc. To reconnect to the network:

 See Figure 3-6. From the main controller display, navigate to the Wi-Fi menu and press ENTER.

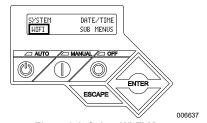


Figure 3-6. Select Wi-Fi Menu

 See Figure 3-7. Use Up/Down and ENTER buttons to scroll to the REDO WIFI SETUP? page. Select YES.

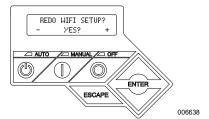


Figure 3-7. Redo Wi-Fi Setup Page

 See Figure 3-8. The controller will display SETUP WIFI NOW! with a 30-minute timer to connect Wi-Fi. Return to Wi-Fi Setup process.

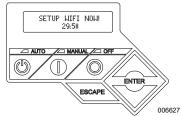


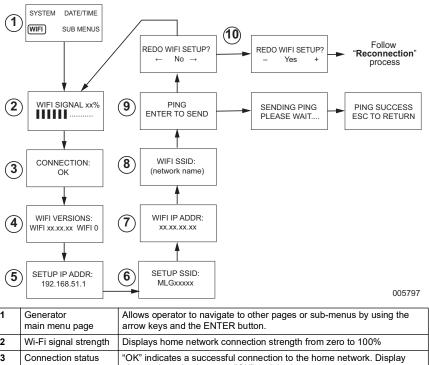
Figure 3-8. Wi-Fi Setup Screen

**NOTE:** Reconnection may take a few minutes. Observe the controller screens closely and follow display instructions when prompted.

# Wi-Fi Menu Map

Wi-Fi configuration and setup screens are accessed through a series of menu options on the generator control panel. To enter the Wi-Fi menu, select "WIFI" at the lower left of the control panel screen and press ENTER.

Figure 3-9 is a sequential map of Wi-Fi menu screens. Descriptions are provided in the accompanying table.



1	Generator main menu page	Allows operator to navigate to other pages or sub-menus by using the arrow keys and the ENTER button.
2	Wi-Fi signal strength	Displays home network connection strength from zero to 100%
3	Connection status	"OK" indicates a successful connection to the home network. Display alternately cycles between "OK" and the home network name.
4	Wi-Fi versions	Displays Wi-Fi firmware and hardware versions
5	Setup IP address	This displays the IP address used to set up Wi-Fi.
6	Setup SSID	The network name broadcast by the Wi-Fi module while the unit is in AP mode. The name begins with MLG, indicating "Mobile Link Generator."
7	Wi-FI IP ADDR	Displays the IP address that the generator is using to connect to the homeowner's network
8	WI-FI SSID	The network name to which the generator is connected
9	PING	Pressing ENTER launches a multi-step check to verify a successful connection to the home network.
10	REDO Wi-FI Setup	Allows the user to restart the Wi-Fi connection process. See <b>Reconnection</b> if selecting "Yes."

Figure 3-9. Wi-Fi Menu Map

# Disable Wi-Fi

Use of the generator Wi-Fi module is optional. If the owner does not wish to use Wi-Fi to monitor the generator, the installer may disable the system.

NOTE: Disabling Wi-Fi is a step in the Installation Wizard and typically performed during initial start-up of the unit. However, the option remains available after installation within the controller "Edit" menu.

# Reset Wi-Fi to Factory Default Settings

Contact an IASD if the Wi-Fi must be reset for any reason. Factory default settings can only be restored by a dealer.

# Section 4: Troubleshooting

# **General Troubleshooting**

Problem	Cause	Correction	
Wi-Fi module not connecting to	ISP has changed.	Follow reconnection process.	
	Power outage has occurred.	Wait for utility or backup power source to return.	
home network	Network router has been replaced.	Follow reconnection process.	
Server Status Messages—see Wi-Fi Menu			
Server Status OK		Connection established	
Time Server Denied		Connection to router established, but cannot detect server	
Router Timeout		Not connected to router	
Wi-Fi Module Missing/Disconnected		Wi-Fi module missing or disconnected	
Checking Internet		Checking status of Internet connection	

# IASD Troubleshooting



#### **A DANGER**

Electrocution. Only an authorized electrician or IASD is permitted to access customer connection area. Contact with live wires or terminals will result in death or serious injury.

The Wi-Fi module is equipped with an internal (green) LED accessible only by an IASD. The LED is located inside the customer connection panel and provides a visual indicator of Wi-Fi operating status and network trouble.

**IMPORTANT NOTE:** The LED is not visible outside the generator enclosure. The side panel and customer connection panel must be removed to view the LED. Only an IASD is permitted access to the customer connection area.

Problem	Cause	Correction	
	RSSI is too low.	Check signal strength; boost network signal as needed.	
LED flashing (approximately	Wireless password is incorrect.	Restart connection process after verifying the information.	
2-3 times per second)	SSID incorrectly entered from the advanced sub menu.	Restart connection process after verifying the information	
LED blinking (approximately once per second)	roximately		
LED off	No power to Wi-Fi module	Check 5 amp fuse located on yellow harness wire.	
	Loose harness connection at controller.	Verify connector on Wi-Fi module harness is correctly seated in socket on controller.	
	No Wi-Fi network connection.	Check Wi-Fi routerreset if necessary.	
	Poor connection.	Add a repeater to boost signal. See Wi-Fi Network Sign Strength.	
	Unit not activated.	Activate unit at www.ActivateGen.com.	
LED steadily on	Wi-Fi module locked up.	Navigate to [Sub Menus]–[Edit]–[WiFi]–ENABLE WIFI. Select NO, then YES, to restart the Wi-Fi module.	

# Section 5: Terms and Acronyms

The following is a limited glossary of terms and acronyms that define the technology used with Mobile Link Wi-Fi enabled modules and controllers. Understanding these terms is important for proper and successful diagnosis of connectivity issues.

Term / Acronym	Description	
Access Point (AP)	A networking hardware device which allows a Wi-Fi device to connect to a wired network. AP mode means the generator Wi-Fi is in broadcasting mode. System is ready to be connected to a home network.	
Application (App)	A computer program which operates on a mobile device such as a tablet or smaphone. Some apps are free, while others must be purchased. Each mobile devimanufacturer operates an "app store" where customers can browse, purchase, and download apps.	
Connecting	Establishing a wireless communication link between two electronic devices.	
Firmware	Permanent software embedded in a computerized device; typically used as the operating system. Firmware is read-only (non-editable) and can only be installed or updated by someone with specialized knowledge and system access. Firmware can also be automatically updated via Wi-Fi if connected to the home network.	
Hardware	The electronics, wires, and devices which form the physical structure of a computer-based system.	
Internet Service Provider (ISP)	A third-party company supplying customers with the hardware, software, and data plans needed to connect computers and / or mobile devices to the Internet.	
Internet Protocol (IP) Address	A unique number assigned to any device accessing the Internet. A typical IP address is in the form of a dotted decimal number like: 01.234.567.90.	
LAN (Local Area Network)	A network of computers and peripheral devices which share a common communication line or file server. LANs can be wired or wireless.	
MAC (Media Access Control) address	The unique identifier or hardware address of each device on a computer network. It is also referred to as the physical address and takes the form: xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx:xx	
Mobile Device	A computer, laptop, smart phone, or tablet, frequently used by consumers to access the Internet.	
Ping	A test signal transmitted to check if a network component, such as a Wi-Fi module, is connected to and communicating with the network.	
Quick Response (QR) Code	A two-dimensional bar code consisting of small black squares arranged in a square grid on a white background. QR codes contain embedded information about a product or links to websites. They are scanned by optical readers, or cameras on mobile devices.	
Radio frequency (RF)	The section of the electromagnetic spectrum between 3000 Hz and 300 GHz—typically used for communication or signaling.	
RS-485	A standard defining the electrical characteristics of drivers and receivers for use in serial communications systems, including Wi-Fi.	
Received Signal Strength Indication (RSSI)	A measurement of how well a device can receive a signal from an access point or router.	
Service Set Identifier (SSID)	An alphanumeric character string which uniquely identifies a wireless local area network (WLAN). SSID is also referred to as the "Network Name" and can be broadcast or hidden.	
Smart Phone	A handheld computer primarily intended for use as a cellular phone, but with other features such as Internet browsers, clock/timer, camera, voice recorder, apps, text messaging capability, and e-mail.	

Term / Acronym	Description	
Software	Computer programs which perform specific tasks on a computer-based system Software is loaded onto the system and (with certain limitations) can be remove upgraded, changed, or modified to suit user needs and preferences.	
Wi-Fi Channel	A given radio frequency spectrum is divided into channels; each centered on a target frequency. The minimum or maximum frequency range occupied by a given channel, such as Wi-Fi, depends upon the frequency width (usually 20Mhz or 40Mhz). Channels One (1), Six (6), or Eleven (11) are recommended for Wi-Fi networks to avoid signal interference caused by channel overlap.	
Wireless Fidelity (Wi-Fi®)	A type of wireless network technology used for connecting to the Internet. Wi-Fi network frequencies are located at 2.4Ghz or 5Ghz. These frequencies prevent transmission interference with cellphones, broadcast radio, TV antennas, or two-way radios.	
Wired Equivalent Privacy (WEP)	An optional authentication and/or encryption mechanism defined in the IEEE 802.11 standard designed to prevent casual network eavesdropping. WEP is considered a weak and compromised legacy form of wireless security.	

Terms and Acronyms

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