Thank you for purchasing SureCall’s Fusion5X cellular signal booster kit. Fusion5X was specifically designed to eliminate frustrations over dropped calls, limited range and slow data rates by amplifying incoming and outgoing cellular signals in buildings up to 20,000 square feet.

The Fusion5X provides enhanced cellular signals for multi-carrier voice and 4G LTE data.

If you have any questions during setup, please reach out to our US-based experienced support technicians:

Call: 1-888-365-6283
Email: support@surecall.com
Or, chat: www.surecall.com, 7:00 am – 5:00 pm PST, Monday – Friday

Watch installation, optimization and troubleshooting techniques in our SureCall University YouTube channel

Stay up to date with all things SureCall

Table of Contents

How It Works ...........................................................................................................................................4
Package Contents ......................................................................................................................................5
Before Installation ........................................................................................................................................7
Installation Overview .................................................................................................................................7
Step 1. Find the area with the Strongest Signal ......................................................................................8
Step 2. Install the Outdoor Antenna .........................................................................................................8
Step 3. Install the Indoor Antennas .........................................................................................................10
Option A: Install Indoor Dome Antennas .................................................................................................10
Option B: Install Indoor Panel Antennas .................................................................................................11
Step 4. Install the Signal Booster ..........................................................................................................13
Booster Hardware .....................................................................................................................................14
LED Indicators ..........................................................................................................................................14
If you Want to Improve Coverage ..........................................................................................................15
Troubleshooting .........................................................................................................................................15
Specifications ............................................................................................................................................16
Kitting Information ....................................................................................................................................17
Three-Year Product Warranty ................................................................................................................18
FCC, IC and Safety Information ............................................................................................................18
How It Works

SureCall’s Fusion5X is a high-quality bidirectional signal booster that enhances cellular signals to areas that are prone to weak cellular coverage.

Fusion5X works with two antennas:

1. An outdoor antenna that communicates with the cell tower.
2. An indoor antenna that communicates with your cell phone.

Signals sent from a cell tower are received by the outdoor antenna, amplified by the booster and then sent to your phone via the indoor antenna. When your phone transmits, the signal is sent to the indoor antenna, and then sent to the cell tower via the outdoor antenna.

Package Contents

1. Unpack all package contents. For missing or damaged items, contact your reseller.
2. Turn over the signal booster and record the model and serial number for reference:

Serial #: ____________________________
Purchase Date: ______________________

Keep the carton and packing material to store the product in case you need to return it.

Standard Fusion5X signal booster packages include the following items:

- One SureCall Fusion5X booster
- One power supply
- Five 75 ft. lengths of SC-400 coax cable (One connects outdoor antenna to booster and four connect the Indoor antennas to the signal booster via four-way splitter)
- One 30 ft. SC-400 cable (to connect the booster to the 4-way splitter)
- One four-way splitter
- One Outdoor Omni antenna
- Four indoor antennas (either Dome or Panel)

Warning: Unauthorized antennas, cables, and/or coupling devices are prohibited by FCC new rules. Please contact the FCC for details: 1-888-CALL-FCC. Changes or modifications not expressly approved by SureCall could void the user’s authority to operate the equipment.
Note: Fusion5X is available in two kits that are customized to your particular needs. Please determine which kit you have from the following list:

<table>
<thead>
<tr>
<th>Model</th>
<th>Package Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-PolyXH/O-72-C04-Kit</td>
<td>One amplifier with power supply, one outdoor omni antenna, four indoor dome antennas, five 75 ft. lengths of SC-400 low loss coax cable and one 30 ft. SC-400 cable with 4-way splitter</td>
</tr>
<tr>
<td>SC-PolyXH/O-72-O04-Kit</td>
<td>One amplifier with power supply, one outdoor omni antenna, four indoor panel antennas, five 75 ft. lengths of SC-400 low loss coax cable and one 30 ft. SC-400 cable with 4-way splitter</td>
</tr>
</tbody>
</table>

For a detailed description, see Kitting Information on page 17.

<table>
<thead>
<tr>
<th>Antenna Type</th>
<th>Model No.</th>
<th>Usage Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor Omni Antenna</td>
<td>SC-288W</td>
<td>Omni antennas are the ideal solution for sending/receiving signal from all directions.</td>
</tr>
<tr>
<td>Indoor Dome Antenna</td>
<td>SC-222W</td>
<td>Dome antennas, generally ceiling-mounted, are omni-directional, sending/receiving signal in all directions indoors.</td>
</tr>
<tr>
<td>Indoor Panel Antenna</td>
<td>SC-248W</td>
<td>Panel antennas, generally wall-mounted, provide directional indoor coverage.</td>
</tr>
</tbody>
</table>

Before Installation

Step 1. Make sure you have positioned the booster close enough to an existing electrical outlet.
Step 2. Make sure you have sufficient cable length between proposed outdoor antenna location and booster connector.
Step 3. Make sure you have sufficient cable length between proposed indoor antenna location and booster connector. Additional cable may be purchased if needed.

Installation Overview

Step 1. Find the outside area that has the strongest signal. (See page 8).
Step 2. Install the outdoor antenna in the area identified in step 1. (See page 8).
Step 3. Install the indoor antennas where increased signal is needed. (See page 10).
Step 4. Mount the signal booster, connect the outdoor and indoor antenna cables to the signal booster, and connect the booster to an AC power source. (See page 13).

FCC 27.5 (d)(4) Statement: Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band as well as mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.
Installing Your Hardware

Step 1. Find the area with the Strongest Signal

Finding Your Strongest Cellular Signal

To send and receive cell phone calls you need to have an adequate cellular signal. This usually means having to be somewhat close to a cell phone tower. Your cellular signal is measured in decibels (dB), which represents the power of the signal. Signal readings appear as a negative number, for example -85dB. The stronger your signal is the closer it gets to zero. As the illustration below shows a -50 dB signal reading is very strong while a signal reading of -100 dB and above is very weak.

How to Determine Your dB Signal Reading

• Using an iPhone: Dial "3001#12345#", a Field Test screen will appear press down on the home button for a few seconds so your dB reading will appear in the upper left hand corner.
• Using an Android: Download the “Network Signal Info” within the Google Play store. Once installed, you will be able to view your dB strength.
• Internet: Go to: www.speedtest.net to test your 3G and 4G data rates.

Step 2. Install the Outdoor Antenna

For best performance, be sure to place the outdoor antenna at least 75 feet from the indoor antennas.

The omni antenna may be mounted directly to a surface or to a J-mount (not included) Outdoor omni antennas receive and send signals in a 360º radius. If you are installing a Yagi antenna set it up facing the cellular tower to find the nearest cell tower go to www.antennasearch.com. Place the antenna as high as possible. Make sure that the mounting area has at least a 36-inch radius clear of obstructions and other radiating elements. The antenna should be mounted in an upright position. See illustration.

1. Unscrew antenna from L-mounting bracket on antenna base with hands, or wrench, if needed.
2. Using vertical plate of bracket, mark position of desired placement with pencil or marker.
3. Unscrew nut on end of stucco screw and remove it along with lock washer and regular washer.
4. Place vertical plate into desired location and tap the screws head first, along with sleeve, into stucco 1/2” to 5/8” deep into place.
5. In this order, place washer, lock washer and nut on each screw and tighten until secure. When tightening screw, sleeve will expand to secure plate. Screw antenna securely back onto horizontal plate.
6. Connect antenna to cable connector of one of the 75 ft. lengths of SC-400 cable and run along route to planned location of your booster.

IMPORTANT: For boosters enhancing T-Mobile’s AWS frequencies, the FCC has stated for consumer signal boosters operating as a fixed station in the 1710 - 1755 MHz uplink 2110 - 2155 downlink bands, the users or installation manual must contain the 30 foot height restriction requirements per FCC 27.50(d)(4).
Installing Your Hardware

Step 3. Install the Indoor Antennas

Indoor antennas for the Fusion5X come with either two omni-directional domes or four directional panels.

- For indoor dome antennas, mount on a ceiling in a central location where signal is needed.
- For indoor panel antennas, mount on a wall or surface facing the area where signal is needed. These directional antennas should always point away from the outdoor antenna. To avoid interference, retain a minimum distance of 3 feet from panel antennas.

Option A: Install Indoor Dome Antennas

The SC-222W multi-band plastic antenna is an omni-directional interior antenna that gathers and sends signals from all sides. Range of antenna is dependent on three factors:

1. Physical obstructions
2. Power generated by booster
3. Signal level received by the outdoor antenna

Besides the antenna itself, parts include mounting equipment for either a flat horizontal surface or a wall. It should be mounted in an upright position for best results. You can also install your interior antenna above the ceiling panel provided there are not materials that could obstruct signals.

For Each Indoor Dome Antenna:

1. Drill a 20 mm diameter hole in the ceiling. The ceiling thickness should be 20 mm, maximum.
2. Unscrew fixing nut from antenna. Place antenna cable through hole. Screw the fixing nut back onto antenna and cable on crawl space side of ceiling and fasten.
3. Connect antenna to cable connector of one of the 75 ft. lengths of SC-400 cable and run along route to planned location of your booster’s 4 way splitter.
4. Tighten fixing nut to secure antenna (do not over-tighten).
5. Once all indoor antennas and cables are in place, connect cable runs from indoor antennas to the 4-way splitter ports.
6. Connect the provided 30 ft. of SC-400 cable to the remaining end of the splitter and route cable to the planned location of your booster.

Note: Be sure to provide enough separation from outdoor antenna (at least 75 ft. is recommended).

Important:

- Storage and transportation: Store and place in non-extreme room-temperature and dry environment
- This antenna should not be used near open fire or flame.

Option B: Install Indoor Panel Antennas

The provided panel antennas are multi-band directional antennas with a 120˚ reach. They should be mounted facing the area signal is needed. It is also important that they do not point toward the outdoor antenna. Range of antenna is dependent on three factors:

1. Physical obstructions
2. Power generated by booster
3. Signal level received by the outdoor antenna

Besides the antenna itself, parts include mounting equipment for a flat horizontal surface. You can also install your interior antenna behind a wall or above a ceiling panel provided there are not materials that could obstruct signals.
Installing Your Hardware

For Each Indoor Panel Antenna:

1. Choose location for mounting antenna on vertical surface. Ideal height off the ground or floor should be the approximate height of regular cell phone use.
2. Using plate, mark position of desired screw placement with pencil or marker.
3. Screw mounting plate into place with the slide panel protruding towards you.
4. Slide antenna securely onto mounting plate.
5. Connect antenna’s RF cable to the cable connector of one of the 75 ft. lengths of SC-400 cable and run along route to planned location of your booster’s 4 way splitter.
6. Once all indoor antennas and cables are in place, connect cable runs from indoor antennas to the 4-way splitter ports
7. Connect the provided 30 ft. of SC-400 cable to the remaining end of the splitter and route cable to the planned location of your booster.

Note: Be sure to provide enough separation from outdoor antenna (at least 75 ft. is recommended).

Step 4. Install the Signal Booster

1. When placing the booster, select a location close to a working AC outlet. Do not expose the signal booster to excessive heat, direct sunlight, moisture, and airtight enclosures.
2. If you’d like to mount the booster to a wall, mark location of screw tabs on the wall in the desired location. Use supplied screws or appropriate screws for surface of mounting location and drill through screw tab holes on booster.
3. Connect the outdoor antenna cable to the signal booster connector port marked OUTSIDE and hand-tighten the connection.
4. Connect the cable coming from the indoor antennas’ 4-way splitter to the booster port marked INSIDE and hand-tighten the connection.
5. Connect the AC power cord to the signal booster.
6. Connect the plug on the other end of the 110V AC power outlet.
7. Turn the booster’s power switch on.

Note: If the Power LED does not turn ON or the Alert LED’s continue to flash, see page 14. This booster is rated for 5-20V input voltage. DO NOT use the booster with a higher voltage power supply. This can damage the booster, cause personal injury and void your warranty.
Installing Your Hardware

Booster Hardware
The following image shows the key hardware components on the cellular booster. Refer to this image as you install your Fusion5X kit components.

Troubleshooting
If you Want to Improve Coverage
1. Find a location that receives a stronger signal and relocate the outdoor antenna to that location.
2. Increase the distance between the outdoor and indoor antennas.

Troubleshooting
In the event you encounter a problem, follow the suggestions below to resolve the issue.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal booster has no power</td>
<td>Verify that the booster switch is turned on. Connect the power supply to an alternate power source. Be sure the power source is not controlled by a switch that can remove power from the outlet. Check the green POWER LED on the signal booster. If it is OFF, return the power supply to SureCall. Contact tech support at to receive an RMA at: 1-888-365-6283 or <a href="mailto:support@surecall.com">support@surecall.com</a>, or go to <a href="http://www.surecall.com">www.surecall.com</a> 7:00 am – 5:00 pm PST, Monday – Friday to chat with a representative.</td>
</tr>
<tr>
<td>After installing your signal booster system, you have no signal or reception</td>
<td>Check the strength of the outdoor signal as close as you can to the outdoor antenna (see instructions on page 8). Verify that cable connections are tightly fitted to the booster and antenna.</td>
</tr>
<tr>
<td>Your signal booster restarted and shut down for 15 minutes, and is now shut down permanently</td>
<td>Each SureCall signal booster is equipped with Auto Shutdown to prevent cell tower interference. The outdoor antenna may be receiving too much signal from the cell tower. Try moving the antenna to a location that provides more separation from the cell tower. If adequate separation is not possible, try lowering the elevation of the antenna to decrease the signal from the tower.</td>
</tr>
</tbody>
</table>

Troubleshooting

LED Indicators

<table>
<thead>
<tr>
<th>LED Color</th>
<th>LED Condition</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>Flashing</td>
<td>Automatic Gain Control (AGC) is self-adjusting. This is part of normal operation.</td>
</tr>
<tr>
<td>Red</td>
<td>Flashing</td>
<td>The signal to the booster is too strong which can cause the booster to automatically turn off. If this happens, move the outdoor antenna to a location with a weaker signal.</td>
</tr>
<tr>
<td>Alternately Flashing Red/ Yellow</td>
<td>Flashing</td>
<td>Self-oscillation has been detected and to prevent it, one or more of the frequency bands have shut down. If this happens: First, try increasing the separation between the indoor and outdoor antennas. If your booster kit includes the directional antennas (example: outdoor Yagi antenna and indoor panel antenna), ensure that they are facing away from the one another.</td>
</tr>
</tbody>
</table>
## Specifications

### Fusion5X Specifications

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
<th>LTE-A (Verizon &amp; AT&amp;T) 700 MHz</th>
<th>Cellular 800 MHz</th>
<th>PCS 1900 MHz</th>
<th>AWS 1700 / 2100 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outdoor Antenna</strong></td>
<td>SC-288W</td>
<td>3 dBi</td>
<td>3 dBi</td>
<td>4 dBi</td>
<td>4 dBi</td>
</tr>
<tr>
<td><strong>Outdoor Cable</strong></td>
<td>SC-400-75NN</td>
<td>4.22 dB</td>
<td>4.41 dB</td>
<td>6.17 dB</td>
<td>5.8 dB / 6.54 dB</td>
</tr>
<tr>
<td><strong>Indoor Cable</strong></td>
<td>SC-400</td>
<td>4.22 dB</td>
<td>4.41 dB</td>
<td>6.17 dB</td>
<td>5.8 dB / 6.54 dB</td>
</tr>
<tr>
<td><strong>Indoor Antenna</strong></td>
<td>SC-222W</td>
<td>3 dBi</td>
<td>3 dBi</td>
<td>6 dBi</td>
<td>6 dBi / 6 dBi</td>
</tr>
<tr>
<td><strong>SC-248W</strong></td>
<td>7 dBi</td>
<td>7 dBi</td>
<td>7 dBi</td>
<td>10 dBi</td>
<td>10 dBi</td>
</tr>
</tbody>
</table>

*All equivalent antennas and cables are suitable for use with the Fusion5X booster.*

**Note:** Due to the recent change of our company name from Cellphone-Mate (CM) to SureCall (SC) we have changed the prefix on all of our antennas, cables and accessories from CM to SC-.

---

### Kitting Information

<table>
<thead>
<tr>
<th>Component</th>
<th>Product Number</th>
<th>Description</th>
<th>Gain / Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outdoor Antenna</strong></td>
<td>SC-288W</td>
<td>LTE-A (Verizon &amp; AT&amp;T) 700 MHz</td>
<td>3 dBi</td>
</tr>
<tr>
<td><strong>Outdoor Cable</strong></td>
<td>SC-400-75NN</td>
<td>Cellular 800 MHz</td>
<td>3 dBi</td>
</tr>
<tr>
<td><strong>Indoor Cable</strong></td>
<td>SC-400</td>
<td>PCS 1900 MHz</td>
<td>4 dBi</td>
</tr>
<tr>
<td><strong>Indoor Antenna</strong></td>
<td>SC-222W</td>
<td>AWS 1700 / 2100 MHz</td>
<td>6 dBi</td>
</tr>
<tr>
<td><strong>SC-248W</strong></td>
<td>7 dBi</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Component:**

- **Outdoor Antenna:** SC-288W 3 dBi, SC-288W 3 dBi, SC-288W 4 dBi, SC-288W 4 dBi
- **Outdoor Cable:** SC-400-75NN 4.22 dB, SC-400-75NN 4.41 dB, SC-400-75NN 6.17 dB, SC-400-75NN 5.8 dB / 6.54 dB
- **Indoor Cable:** SC-400 4.22 dB, SC-400 4.41 dB, SC-400 6.17 dB, SC-400 5.8 dB / 6.54 dB
- **Indoor Antenna:** SC-222W 3 dBi, SC-222W 3 dBi, SC-222W 6 dBi, SC-222W 6 dBi / 6 dBi
- **SC-248W** 7 dBi, SC-248W 7 dBi, SC-248W 10 dBi, SC-248W 10 dBi
Three-Year Product Warranty

SureCall warrants its products for three years from the date of purchase against defects in workmanship and/or materials. Specifications are subject to change. The three-year warranty only applies to products meeting the latest FCC Certification Guidelines stated on 2/20/2013 and going into effect April 30, 2014. A two-year warranty applies to any products manufactured before May 1, 2014.

Products returned by customers must be in their original, un-modified condition, shipped in the original or protective packaging with proof of purchase documentation enclosed, and a Return Merchandise Authorization (RMA) number printed clearly on the outside of the shipping container. Buyers may obtain an RMA number for warranty returns by calling the SureCall Return Department toll-free at 1-888-365-6283. Any returns received by SureCall without an RMA number clearly printed on the outside of the shipping container will be refused. In order to receive full credit for signal boosters, all accessories originally included in the signal booster box must be returned with the signal booster. (The Buyer does not need to include accessories sold in addition to the signal booster, such as antennas or cables.) This warranty does not apply to any product determined by SureCall to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages the product’s physical or electronic properties.

SureCall warrants to the Buyer that each of its products, when shipped, will be free from defects in material and workmanship, and will perform in full accordance with applicable specifications. The limit of liability under this warranty is, at SureCall’s option, to repair or replace any part or all thereof which was purchased up to THREE YEARS after May 1, 2014 or TWO YEARS for products purchased before May 1, 2014, as determined by examination by SureCall, prove defective in material and/or workmanship. Warranty returns must first be authorized in writing by SureCall. Disposition of any SureCall product by anyone other than an authorized SureCall reseller voids the warranty in its entirety. SureCall reserves the right to make changes in any of its products without incurring any obligation to make the same changes on previously delivered products. As a condition to the warranties provided for herein, the Buyer will prepay the shipping charges for all products returned to SureCall for repair, and SureCall will pay the return shipping with the exception of products returned from outside the United States, in which case the Buyer will pay the shipping charges. The Buyer will pay the cost of inspecting and testing any goods returned under the warranty or otherwise, which are found to meet the applicable specifications definition not covered by this warranty.

Products sold by SureCall shall not be considered defective or non-conforming to the Buyer’s order if they satisfactorily fulfill the performance standard or specification of which the Buyer has notice. SureCall makes no warranty whatsoever in respect to accessories or parts not supplied by it.

Limitations of Warranty, Damages and Liability:

EXCEPT AS EXPRESSLY SET FORTH HEREIN, THERE ARE NO WARRANTIES, CONDITIONS, GUARANTEES, OR REPRESENTATIONS AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHER WARRANTIES, CONDITIONS, GUARANTEES, OR REPRESENTATIONS, WHETHER EXPRESSED OR IMPLIED, IN LAW OR IN FACT, ORAL OR IN WRITING.

SURECALL AGGREGATE LIABILITY IN DAMAGES OR OTHERWISE SHALL NOT EXCEED THE PAYMENT, IF ANY, RECEIVED BY CELLPHONE MATE, INC. FOR THE UNIT OF PRODUCT OR SERVICE PURCHASED OR TO BE PURCHASED, AS THE CASE MAY BE, WHICH IS THE SUBJECT OF CLAIM OR DISPUTE. IN NO EVENT SHALL SURECALL BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES, HOWEVER CAUSED.

All matters regarding this warranty shall be interpreted in accordance with the laws of the State of California, and any controversy that cannot be settled directly shall be settled by arbitration in California in accordance with the rules then prevailing of the American Arbitration Association, and judgment upon the award rendered may be entered in any court having jurisdiction thereof. If one or more provisions provided herein are held to be invalid or unenforceable under applicable law, then such provision shall be ineffective and excluded to the extent of such invalidity or unenforceability without affecting in any way the remaining provisions hereof.

FCC, ICC and Safety Information

SureCall has made a good faith effort to ensure the accuracy of the information in this document and disclaims the implied warranties of merchantability and fitness for a particular purpose and makes no express warranties, except as may be stated in its written agreement with and for its customers. SureCall shall not be held liable to anyone for any indirect, special or consequential damages due to omissions or errors. The information and specifications in this document are subject to change without notice. © 2016. All Rights Reserved. All trademarks and registered trademarks are the property of their respective owners.
This is a **CONSUMER** device

**BEFORE USE, you MUST REGISTER THIS DEVICE** with your wireless provider and have your provider’s consent. Most wireless providers consent to the use of signal boosters. Some providers may not consent to the use of this device on their network. If you are unsure, contact your provider.

You **MUST** operate this device with approved antennas and cables as specified by the manufacturer. Antennas **MUST** be installed at least 20 cm (8 inches) from any person. You **MUST** cease operating this device immediately if requested by the FCC or a licensed wireless service provider.

**WARNING.** E911 location information may not be provided or may be inaccurate for calls served by using this device.

This device may be operated ONLY in a fixed location for in-building use.

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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:

- Reorient 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.

**FCC 27.50(d)(4) Statement:** Fixed, mobile and portable (hand-held) stations operating in the 1720-1755 MHz band are limited 1 Watt EIRP. Fixed stations operating in this band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in this band must employ a means for limiting power to the minimum necessary for successful communications.