

# SureCall C-BAND SIGNAL METER

## SC-CBAND-METER User Manual

### Three-Year Warranty

Register at [surecall.com/activate](http://surecall.com/activate).

SureCall warrants its products for three years from the date of purchase against defects in workmanship and/or materials. Specifications are subject to change.

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 returned to sender. In order to receive full credit, all parts originally included in the kit packaging must also be returned.

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 product or part 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. Disassembly of any SureCall product by anyone other than an authorized representative of SureCall voids this 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 or which are not defective or 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 requirements that were published in the product specification literature, or in accordance with samples provided by SureCall. This warranty shall not apply to any products or parts thereof which have been subject to accident, negligence, alteration, abuse, or misuse. 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 FURNISHED OR TO BE FURNISHED, 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, HOWSOEVER 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.

### Safety Information

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the Federal Trade Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and radiates 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
- 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

### PACKAGE CONTENTS

- C-Band Signal Meter
- Flat right-angle antenna with SMA-Male connector
- 24" SMA-Male to N-Male cable connector
- N-Female to F-Male connector
- N-Female to F-Female connector
- N-Female to 4.3-10 Male connector
- N-Female to 4.3-10 Female connector
- 9" SMA-Male to N-Female cable connector
- 110V AC power adapter
- (4) AAA NiMH rechargeable batteries



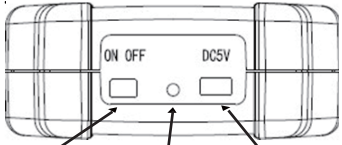
The C-Band Signal Meter by SureCall is an essential site survey and installation aid used to measure signal information of C-Band frequencies in the 3700-3980 MHz range. The C-Band Signal Meter is specifically designed to assist in the installation of a C-Band Signal Booster.

- Using the whip antenna, the meter can reliably read open air C-Band signal levels to survey the outside frequency environment, approximate the location for a donor antenna and map indoor signal levels to maximize signal booster coverage.
- Additionally, the meter connects directly to your donor antenna during installation to pinpoint the optimum placement and angle for best booster performance.

## 1. Turning on and Charging the Meter

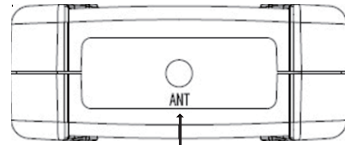
The power switch is used to turn on/off the device. The power supply interface is a mini USB interface. You can plug the AC power supply or any power source marked DC5V into it. Make sure that the power source can provide over 1 amp of current. The charging light is a green LED. When it is plugged in and the power switch is OFF, the LED will continue to blink while it is being charged. If the AAA batteries are fully charged, the LED will blink once. When the charging is finished, the LED will stay lit.

### Bottom View



Power Charging Indicator Mini-USB

### Top View



Connection for SMA Antenna or Cable

## 2. Using Antenna Interfaces

### Antenna

The included whip antenna is used to pick up outside signal to determine the strengths and weaknesses of each band in order to determine the ideal location to install an outside antenna. Connect the antenna to the top of the meter to begin taking measurements.

### Antenna Interfaces

The pigtail cable connector is used during installation to measure the signal received by a donor outside antenna. Identify the best location and angle to install your antenna by connecting directly to the antenna.

1. Locate the cable connector and adapters included in the kit.
2. Attach the SMA end of the cable to the SMA antenna jack on the top of the signal meter labeled "ANT".
3. Add the necessary adapter to the other end of the cable and then connect directly to the donor antenna.



**WARNING:** Attaching the cable connectors from the meter to a cellular amplifier can permanently damage your signal meter. If you wish to measure signal from the amplifier, contact tech support at [support@surecall.com](mailto:support@surecall.com) to find out how.

## 3. Understanding the Screens

There are three operating modes:

Mode-I	Mode-II	Mode-III
Verizon	Block A3	C-BAND
RSRP: -114 dBm	Freq: 3750.0 MHz	Range: 3700-3980M
RSSI: -84 dBm	RSSI: -110 dBm	RSSI: -110 dBm

Measure the RSRP & RSSI of operating Verizon or AT&T

Measure the RSSI of each block within the authorized frequency range of C-Band (see table 1)

Detects the RSSI of the full frequency range of C-Band

## 4. Navigating the Screens

There are four keys for user actions (see keypad example)

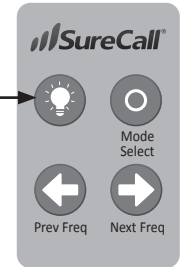
**LIGHT SWITCH** button is used to turn the backlight ON or OFF. To use, tap the light bulb button once.

**MODE SELECT** button is used to navigate between Mode-I, Mode-II or Mode-III. By default, it is in Mode-I when turned on and takes about 2 minutes to search and synchronize.

Note: During the search process or when not synchronized, **NONE** will be displayed. If it stays in a measurement state for a long time and displays **NONE**, it indicates that there is no network signal or the network signal is weak, which will prevent measurement.

Within each Mode, **PREV FREQ** and **NEXT FREQ** buttons are used to navigate the options

- In Mode-I, select RSRP from different operators by pressing the Prev Freq and Next Freq buttons.
- In Mode-II, select blocks by pressing the Prev Freq and Next Freq buttons.
- In Mode-III, the Prev Freq and Next Freq buttons have no effect.



### Blocks (Mode-II)

The **Prev Freq / Next Freq** buttons will navigate between frequency blocks.

Blocks	C-Band (MHz)
1	A1 3700-3720
2	A2 3720-3740
3	A3 3740-3760
4	A4 3760-3780
5	A5 3780-3800
6	B1 3800-3820
7	B2 3820-3840

Blocks	C-Band (MHz)
8	B3 3840-3860
9	B4 3860-3880
10	B5 3880-3900
11	C1 3900-3920
12	C2 3920-3940
13	C3 3940-3960
14	C4 3960-3980

### Blocks (Mode-III)

Band Designation	Frequency Range (MHz)
C-Band	3700-3980

## Product Specifications:

Frequency Ranges	3700-3980
Standards Supported	C-Band
Operation mode	TDD
Detect mode	Mode-I, Detects RSRP & RSSI of Verizon or AT&T Mode-II, Detects the RSSI of one frequency block Mode-III, Detects the RSSI of the full frequency range of C-Band
Input Impedance	50 ohm
Max Input Shown	-40 dBm
Receive Sensitivity	-95 dBm
Tolerance	<3 dB
DC Power	4 AAA rechargeable batteries
AC Power Transformer	AC Input: 110V, 60Hz; DC Output: 5V
Power Consumption	<4 Watts, under normal conditions <2 Watts
RF Connector	SMA Female
Cable	RG174
Working Time	Up to 2 hrs
Dimensions	6.3 x 3.3 x 1.3 inches
Weight	7.3 oz