



SURECALL CELL SIGNAL TESTER OPERATING MANUAL

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 Telus/Bell/Sasktel8

INTRODUCTION

FEATURES & SPECS

The CM-Meter-01 RF signal meter by Cellphone-Mate provides accurate information of radio frequency signals. The device can receive the RF signal from air an installed outdoor antenna or connects directly to the field antenna.

This device works with LTE, Cellular, PCS and AWS bands. The purpose of the RF Signal meter is to assist in the installation of a Signal Booster, specifically for mapping the frequency environment, pointing directional antennas, and maximizing signal booster coverage.

Features

- Five bands: 700 & 800 & 1900 & 2100MHz-(LTE, Cellular, PCS and AWS)
- High Receiving Sensitivity -110dBm
- Three selectable modes
- Controllable backlight for dark environments
- Rechargeable design with four AAA batteries
- Long working time (2.5 - 3.5 hours)
- Easy to carry

Frequency	Downlink: 728 -746/746-757/869-894/1930-1990/2110-2155MHz
Input Impedance	50 ohm
Max. Gain Shown	-40dBm
Standard Supported	LTE Verizon/LTE AT&T/Cellular/PCS/AWS
Receive Sensitivity	-110dBm
Tolerance	<3dB
AC Power Transformer	Input AC110V, 60Hz; Output: DC5V
DC Power	4 AAA Rechargeable Batteries
Power Consumption	<1.5Watts
RF connector	SMA Female
Cable	RG174
Working Time	Stanby: 3.5 hours / Active: 2.5 hours
Dimensions	6.3*3.3*1.3 inch
Weight	205g

INTRODUCTION

PPN JDM-150 MODEM CELL SIGNAL

The PPN JDM-150 ONLY reports its cell signal when it is establishing a connection on power up. This means that if cell signal is lost the Cell/Wifi light will CONTINUE to blink even though there may be zero cell signal.

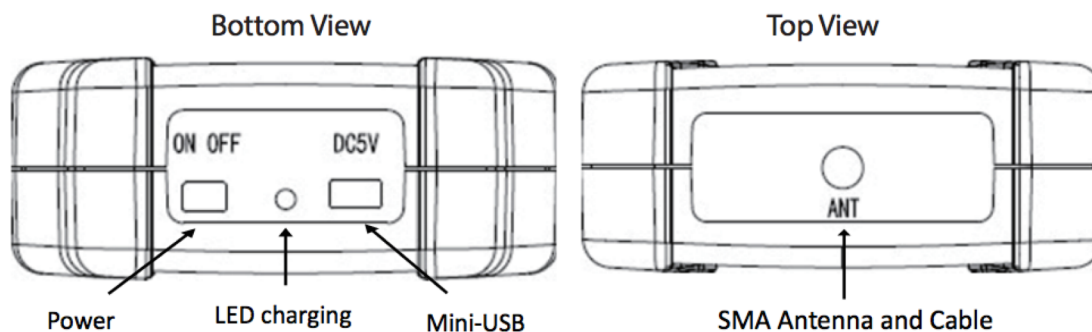
After 4.5 minutes of no cell signal the PPN modem will reboot itself to try and reestablish that cell connection.

This is very evident if you perform a test in a bad cell area and use a booster which will more than likely give you signal. Unplug the booster and watch the system go into RTK-X within 15 seconds. Plug booster back in and at the 5 minute mark almost exactly you will have full RTK again once the modem has rebooted and reestablished cell connection.

SETUP

POWER & CHARGING

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.



SETUP CONT

ANTENNA USE & INSTALLATION

The included antenna is used to pick up an outside RF wireless signal to determine its strengths and weaknesses of each band to determine an ideal location to install outside antennas, for example. To attach, screw antenna jack clockwise at top of meter. Antenna Interface uses the included high gain antenna with SMA cable connector to gauge the best outside RF wireless signal for installing or adjusting a directional outside antenna.

Step 1: Attach the SMA end of the antenna jack on the top of the signal meter.

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 meter to amplifier, contact tech support at support@cellphone-mate.com to find out how.

OPERATING

UNDERSTANDING THE SCREENS

There are four lines of information available to users:

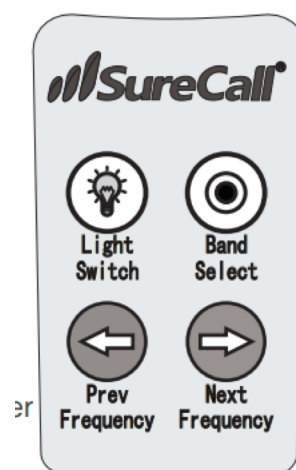
- The top line displays detecting mode (see table below) and battery life
- The second line displays band
- The third line displays detecting block in Mode-I, detecting frequency in Mode-II and detecting bands frequency range in Mode III

Note: *Cellular signal reading is reflected in a negative number. The lower the negative number, the stronger the signal.*

UNDERSTANDING THE KEYPAD

There are four keys for user actions (see keypad example above) The Light Switch button has two functions:

1. To turn the backlight ON or OFF, press quickly once.
2. To change the detection mode, press the button for a longer period of time. Below is a list of what the three modes represent

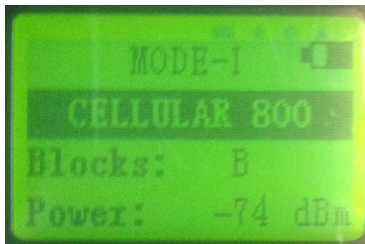


Mode-I	Detects the power strength of one frequency block
Mode-II	Detects the power strength of one frequency point with 5MHz band
Mode-III	Detects the total frequency power strength of one band

OPERATING

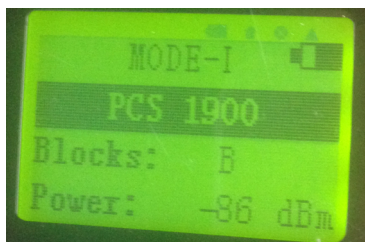
TELUS/BELL/SASKTEL

You will want to check three frequencies and bands when testing 3G network strength in a given area



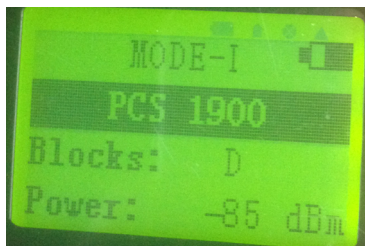
CELLULAR 800 – Block “B”

- 5) Press band select twice
- 6) Push next frequency once



PCS 1900 – Block “B”

- 1) Press band select three times
- 2) Push next frequency once



PCS 1900 – Block “D”

- 3) Press band select three times
- 4) Push next frequency three times

Between all three of these bands you should be able to understand better what the cell signal is like in a given area. Still the best way to test proper cell reception is with a full RTK system hooked to a PPN modem and booster. Unplug the booster from power and check to see if system goes into RTK-X modem within 15 seconds.