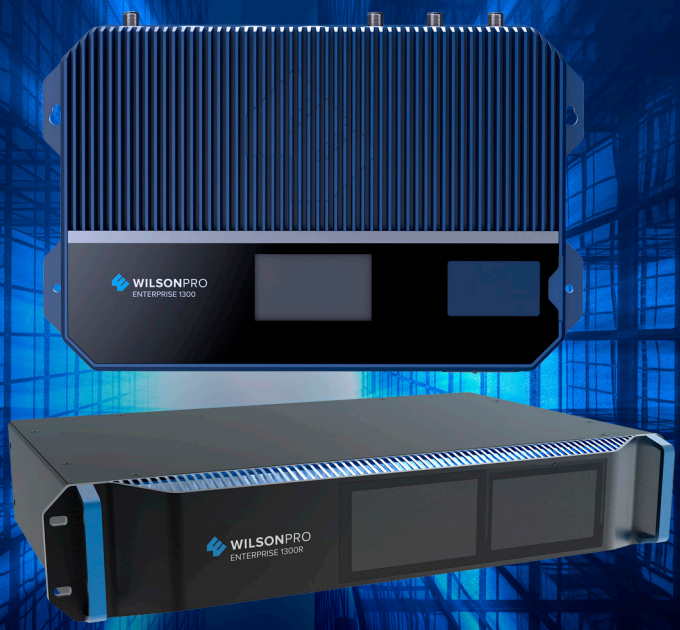
WILSONPRO™
A Wilson Electronics Brand

# ENTERPRISE 1300/1300R

In-Building Cell Signal Amplifier
With Frequency-Specific Outside Antenna Ports and
LTE Connected Remote Monitoring




# Installation Guide

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# Package Contents

## Enterprise 1300 SKU 460149 & 460149F

Enterprise 1300 Amplifier
Wide Band Directional Antenna (qty. 1)
Dome Antenna (qty. 1)
100 ft. Wilson400 Cable (qty. 2)
50 Ohm Lightning Surge Protector (qty. 1)
2 ft. Wilson400 Cable (qty. 1)

## Enterprise 1300R SKU 460150 & 460150F

Enterprise 1300R Rack Mount Amplifier
Wide Band Directional Antenna (qty. 1)
Dome Antenna (qty. 1)
100 ft. Wilson400 Cable (qty. 2)
50 Ohm Lightning Surge Protector (qty. 1)
2 ft. Wilson400 Cable (qty. 1)

# Enterprise 1300 & 1300R

## In-Building Cell Signal Amplifier Systems

Frequency-specific “split mode” option, facilitating separate outdoor antennas for different bands, resulting in improved indoor coverage.

Remote system monitoring. Connects to WilsonPro Cloud service via internal, pre-activated LTE modem.

High max uplink power (up to +26 dBm): will reach far-away cell tower.

High max downlink power (+17 dBm) for up to 45,000 sq ft coverage with a strong “5 bar” outside signal.

The Enterprise 1300 & 1300R cell signal amplifier systems provide significantly enhanced 4G LTE and 3G voice and data coverage inside buildings where cell signals may not otherwise penetrate. Installation of a Enterprise 1300 & 1300R cell signal amplifier system results in fewer dropped calls, improved voice quality, uninterrupted texts, and faster data speeds—along with better audio and video streaming.

The Enterprise 1300 & 1300R cell signal amplifier systems also incorporates Wilson Electronics' state-of-the-art XDR (eXtended Dynamic Range) technology that prevents signal overload conditions which can, in accordance with regulations, force the amplifier to shut down. When the Enterprise 1300 & 1300R cell signal amplifier systems sense that any incoming cell signal is too strong and threatens to overload the system, XDR automatically reduces amplifier gain to compensate while maintaining signal coverage throughout the building. Enterprise 1300 & 1300R cell signal amplifier systems incorporate an easy-to-use color LCD touch screen, and both antenna ports are located on same side of the unit for simple installation. Like all WilsonPro cell signal boosters, the Enterprise 1300 & 1300R cell signal amplifier systems are universal: they work for all cellular devices, all services and all U.S. and Canada cell phone carriers.

# Key Features

**Extended Dynamic Range (XDR) for continuous connectivity:** XDR lets the Enterprise 1300 & 1300R systems work with an incoming signal and never shuts down due to a strong outside signal.

**Simple Wall-Mount & Rack Mount Installation:** An indoor and outdoor port(s) are located on top of the amplifier for easy antenna connections, while an exposed mounting flange on each amplifier provides for simple installation.

**Onboard Software for Better Control:** The amplifier is automatically controlled with onboard software, ensuring great connectivity throughout large spaces and multi-story buildings. The amplifier will adjust its gain level up or down as required by the conditions of the immediate signal environment.

**Color LCD Touch Screen:** The Enterprise 1300 & 1300R systems utilize a color LCD touch screen, for assessing amplifier performance, making adjustments to the outside antenna.

# Post Install Setup

The Enterprise 1300 & 1300R systems are designed with advanced internal programming, which allows it to automatically adjust for a variety of conditions, while still amplifying weak signals.

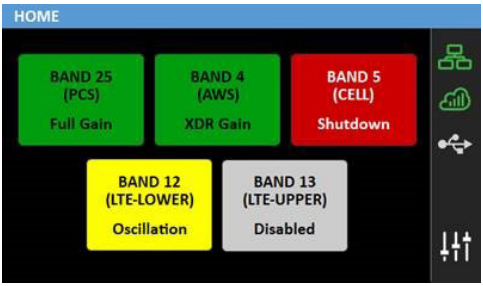
**THE SERVER PORT ANTENNAS WILL BE USED TO PROVIDE COVERAGE TO DIFFERENT AREAS WITHIN A BUILDING AND WILL BE INSTALLED WITH A MINIMUM OF 10 METERS SEPARATION BETWEEN SERVER PORT ANTENNAS.**

# Menu System

The Enterprise 1300 & 1300R takes about 8 seconds to boot up. Once boot up is complete, the home screen will appear, showing the amplification and status of each port and band.

Start Up Screen

Home Screen




## Band Menu Color Description

A solid green light indicates that a band is operating correctly with maximum allowable gain.

A solid yellow light indicates band gain reduction because of an oscillation condition. Reposition antennas (increase separation between indoor and outdoor antennas, and point in opposite directions) and then reboot (turn the unit off & on) the Enterprise 1300 & 1300R system to reactivate the band and maximize performance. When adequate separation is achieved, the yellow lights will return to green upon reboot.

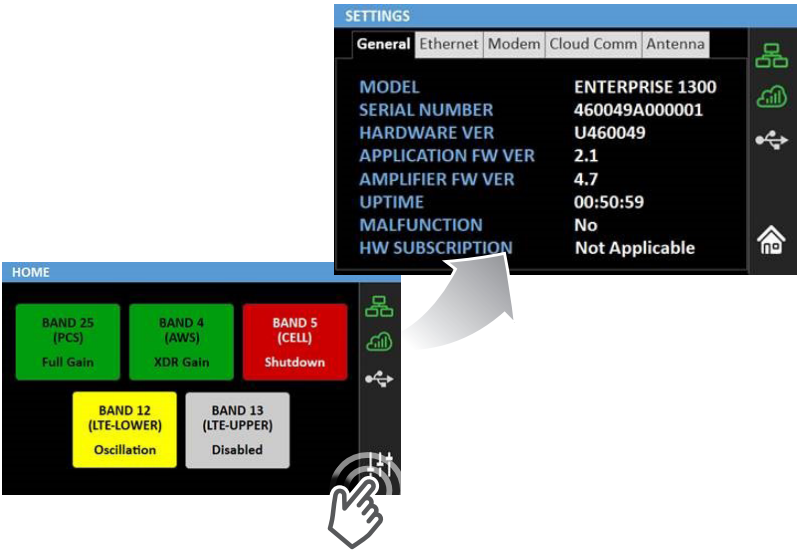
Note: when the light is yellow, the band is operational; however, performance is reduced.

A red light indicates a band has been shut down because of a severe oscillation condition or repeated oscillation. Reposition antennas (increase separation between indoor and outdoor antennas, and point in opposite directions) and then reboot (turn the unit off & on) the Enterprise 1300 & 1300R system to reactivate the band and maximize performance. When adequate separation is achieved, the red light(s) will return to green upon reboot.

Gray indicates band has been disabled.

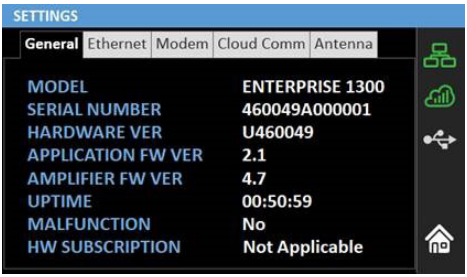
# Settings Screen

Tap **'Settings Icon'** to view the Settings Screen.



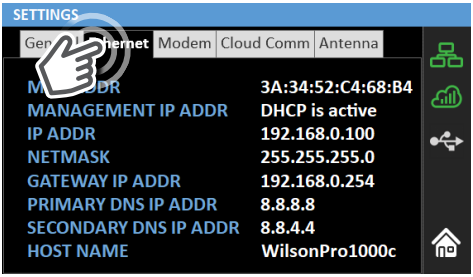

**There are 5 Settings Screens represented by "tabs".** Tap the tab heading to view each Settings Screen.

**Note:** Bands and Ports are disabled or enabled from the Cloud or Local Configuration Utility only.

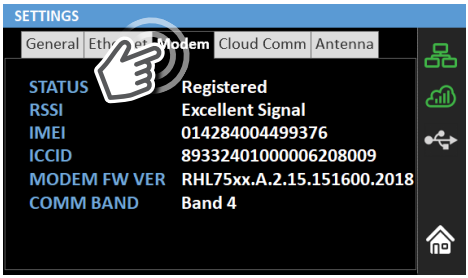


(MENU SYSTEM - SETTINGS SCREEN cont.)

### Ethernet Settings Tab

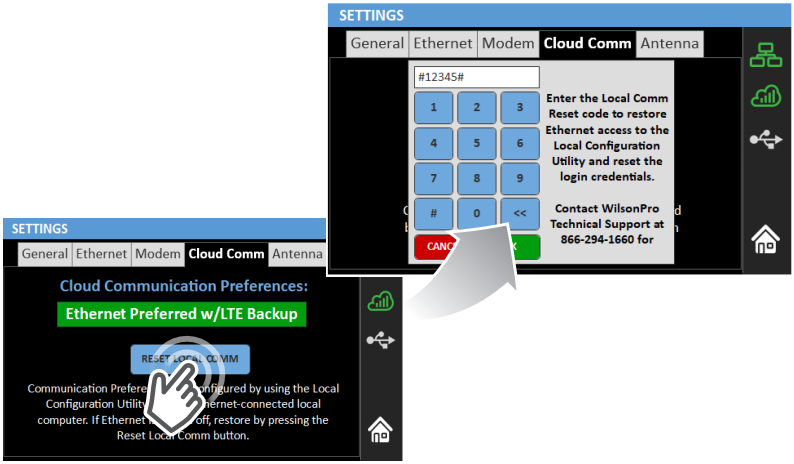



### Modem Settings Tab



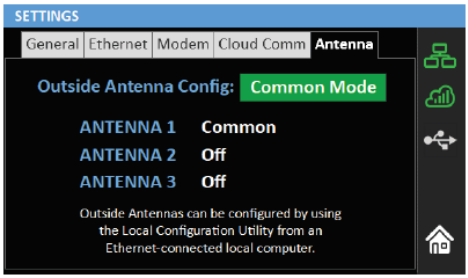
### Cloud Communication Settings Tab

**Note:** The Reset Local Comm button (button name will likely change) is used in case the user has configured the amplifier such that the Local Configuration Utility is not accessible, e.g., if the communication preferences are set to “LTE Only”. The “reset” function will change the communication preferences to “LTE Preferred w/Ethernet Backup”. It will also reset the login credentials for the Location Configuration Utility to factory defaults.



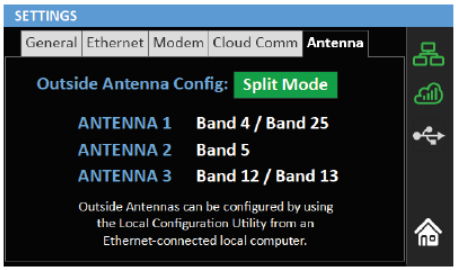

### Antenna Settings Tab

Common Mode is configured from the Local Configuration Utility and should be set when using a single Donor/Outside Antenna.

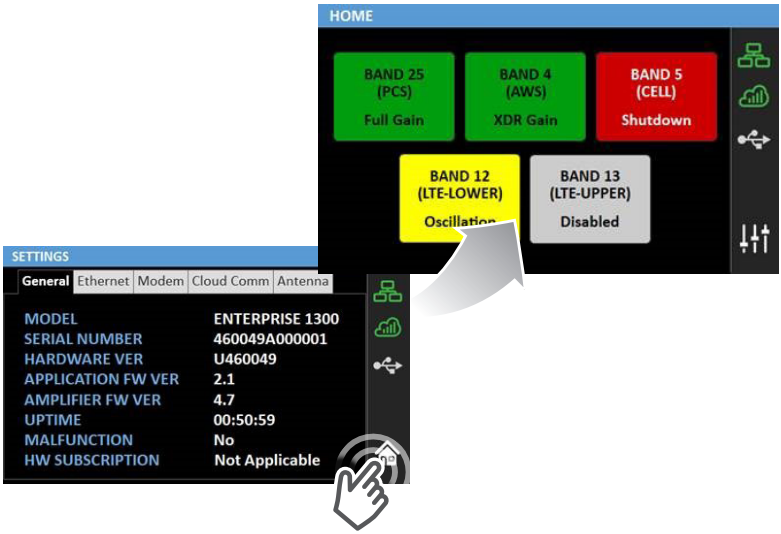


### Split Mode Configuration

Split Mode is configured from the Local Configuration Utility and should be sent when using separate Donor/Outside Antennas for Band 4/25, Band 5, and Band 12/13.

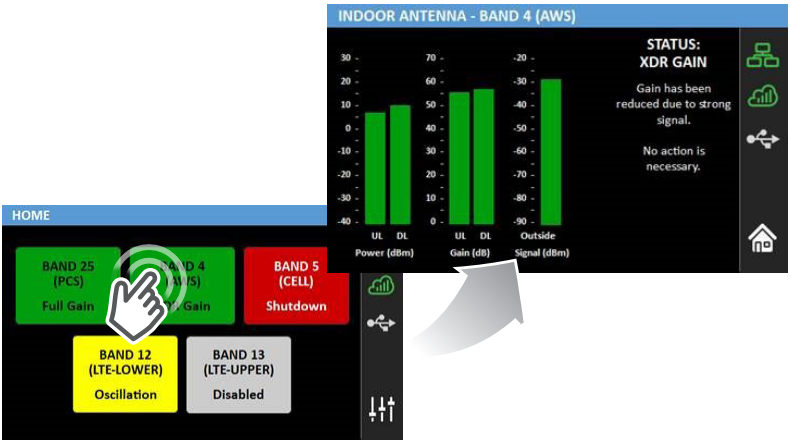



To go back to the Home Screen top on the **Home Icon** (in the lower right corner).

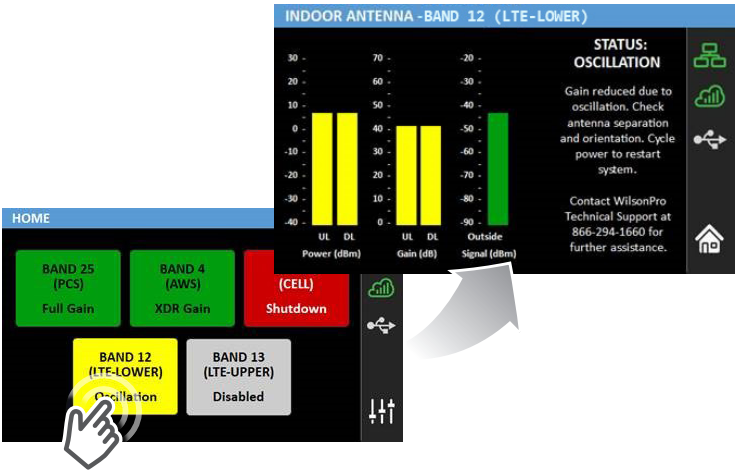


# Band Status Screens

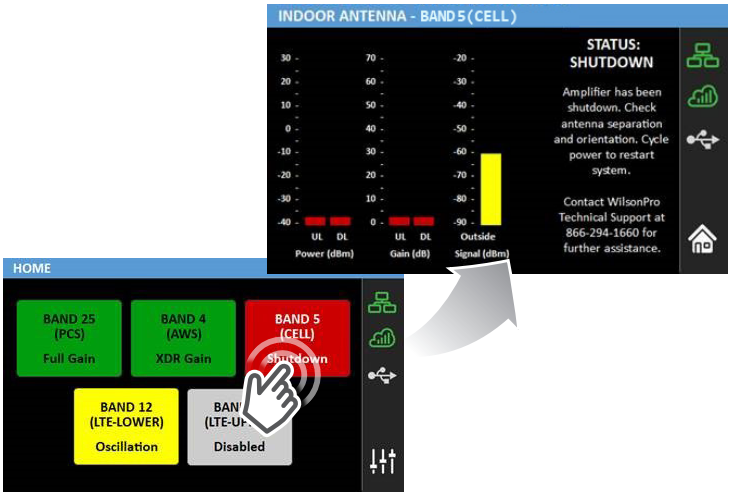
**To view specific band information** (such as the strength of the received uplink & downlink signal, outside signal strength, and amplifier gain status) tap the desired band on the home screen.




**Oscillation Example**



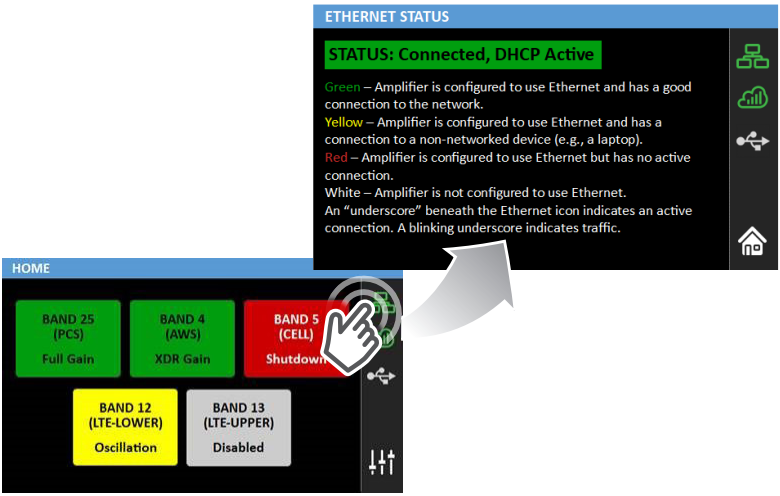
**Shutdown Example**



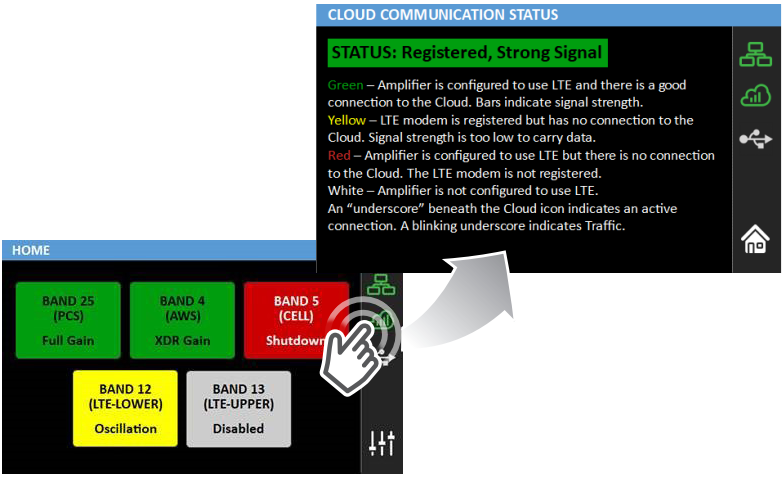
# Connectivity Status Screens

### Ethernet Status Icon

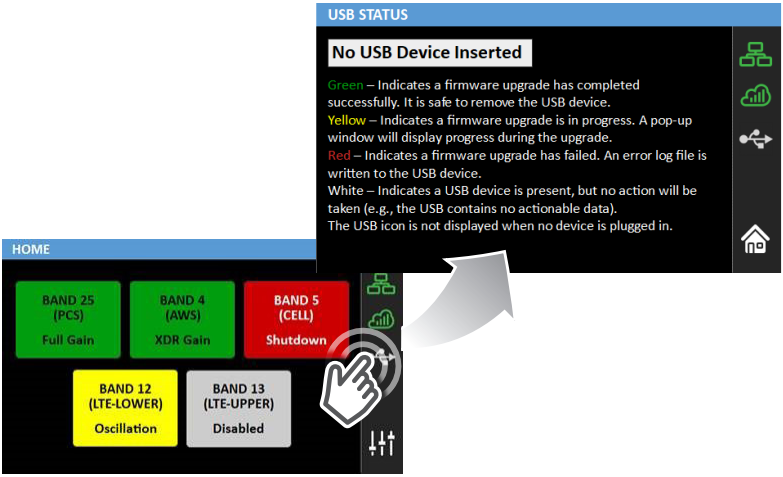
The three icons in the upper right provide status related to the Ethernet connection, Cloud connection, and USB device (if inserted).

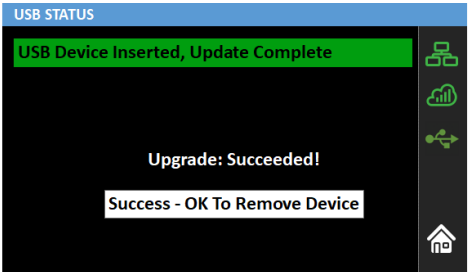



### Cloud Status



## USB Status


USB STATUS
No USB Device Inserted
Green – Indicates a firmware upgrade has completed successfully. It is safe to remove the USB device.
Yellow – Indicates a firmware upgrade is in progress. A pop-up window will display progress during the upgrade.
Red – Indicates a firmware upgrade has failed. An error log file is written to the USB device.
White – Indicates a USB device is present, but no action will be taken (e.g., the USB contains no actionable data).
The USB icon is not displayed when no device is plugged in.
HOME
BAND 25 (PCS) Full Gain
BAND 4 (AWS) XDR Gain
BAND 5 (CELL) Shutdown
BAND 12 (LTE-LOWER) Oscillation
BAND 13 (LTE-UPPER) Disabled


USB STATUS
USB Device Inserted, Update Complete
Upgrade: Succeeded!
Success - OK To Remove Device

# Safety Guidelines

## Warnings

To uphold compliance with network protection standards, all active cellular devices must maintain at least 6 feet of separation distance from Panel and Dome antennas.

Use only the power supply provided in this package. Use of a non-Wilson Electronics product may damage your equipment.

The Signal Amplifier unit is designed for use in an indoor, temperature-controlled environment (operating temperature ranges from -40°C to 60°C – -40°F to 140°F). It is not intended for use in attics or similar locations subject to temperatures in excess of that range.

RF Safety Warning: Any antenna used with this device must be located at least 8 inches from all persons.

AWS Warning: The Outside Antenna must be installed no higher than 10 meters (31'9") above ground.

**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.

In Canada, **BEFORE USE** you must meet all requirements set out in ISED CPC-2-1-05.

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 (i.e., **MUST NOT** be installed within 20 cm of) any person.

You **MUST** cease operating this device immediately if requested by the FCC (or ISED in Canada) or 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 (i.e..may operate in a fixed location only) for in-building use.

**FOR MORE INFORMATION ON REQUIREMENTS SET OUT IN ISED CPC-2-1-05, SEE BELOW:**

http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf08942.html

**FOR MORE INFORMATION ON REGISTERING YOUR SIGNAL BOOSTER WITH YOUR WIRELESS PROVIDER, PLEASE SEE BELOW:**

**Sprint:** http://www.sprint.com/legal/fcc_boosters.html
**T-Mobile/MetroPCS:** https://support.t-mobile.com/docs/DOC-9827
**Verizon Wireless:** http://www.verizonwireless.com/wcms/consumer/register-signal-booster.html
**AT&T:** https://securec45.securewebsession.com/attsignalbooster.com/
**U.S. Cellular:** http://www.uscellular.com/uscellular/support/fcc-booster-registration.jsp

# Antenna Kit Options

The following accessories are certified by the FCC to be used with the **ENTERPRISE 1300/1300R.**

This radio transmitter 4726A-460050 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

| | B12/17 | B13 | B5 | B4 | B25/2 |
|---|---|---|---|---|---|
| Outside antenna maximum permissible antenna gain (dBi) 50Ω | 3.576 | 3.21 | 3.012 | 2.048 | 1.918 |
| Inside antenna maximum permissible antenna gain (dBi) 50Ω | -2.43 | -1.69 | -3.09 | -0.33 | -1.29 |

**314411**
Wide Band Directional Antenna (Outside Antenna)

**952300**
100 ft. Wilson400 Cable (for Outside Antenna)

**304412**
**Dome Antenna (Inside antennas)**

**952300**
100 ft. Wilson400 Cable (for Inside Antennas)

**859902**
50 Ohm Lightning Surge Protector

**952302**
2 ft. Wilson400 Cable

# Specifications

| | | | | | |
|---|---|---|---|---|---|
| **Model Number** | 460149 / 460149F / 460150 / 460150F | | | | |
| **FCC ID** | PWO460049 / PWO460049 / PWO460050 / PWO460050 | | | | |
| **IC ID** | 4726A-460049 / 4726A-460049 / 4726A-460050 / 4726A-460050 | | | | |
| Connectors | N-Connectors | | | | |
| Antenna Impedance | 50 Ohms | | | | |
| Frequency | 698-716 MHz, 729-756 MHz, 777-787 MHz, 824-894 MHz, 1850-1995 MHz, 1710-1755/2110-2155 MHz | | | | |
| **Power output for single cell phone (Uplink) dBm** | **700MHz Band12/17** | **700MHz Band13** | **800MHz** | **1700MHz** | **1900MHz** |
| | 23.9 | 23.9 | 25.1 | 23.7 | 26.7 |
| **Power output for single cell phone (Downlink) dBm** | **700MHz Band12/17** | **700MHz Band13** | **800MHz** | **2100MHz** | **1900MHz** |
| | 16.7 | 16.8 | 16.9 | 16.7 | 16.7 |
| Noise Figure | 5 dB nominal | | | | |
| Isolation | > 90 dB | | | | |
| **Power Requirements** | 120V AC 0.5A | | | | |

The term "IC" before the radio certification number only signifies that Industry Canada technical specifications were met.

Each Signal Booster is individually tested and factory set to ensure FCC compliance. The Signal Booster cannot be adjusted without factory reprogramming or disabling the hardware. The Signal Booster will amplify, but not alter incoming and outgoing signals in order to increase coverage of authorized frequency bands only. If the Signal Booster is not in use for five minutes, it will reduce gain until a signal is detected. If a detected signal is too high in a frequency band, or if the Signal Booster detects an oscillation, the Signal Booster will automatically turn the power off on that band. For a detected oscillation the Signal Booster will automatically resume normal operation after a minimum of 1 minute. After 5 (five) such automatic restarts, any problematic bands are permanently shut off until the Signal Booster has been manually restarted by momentarily removing power from the Signal Booster. Noise power, gain, and linearity are maintained by the Signal Booster's microprocessor.

This device complies with Part 15 of FCC rules. Operation is subject to two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by weBoost could void the authority to operate this equipment.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device. Changes or modifications not expressly approved by weBoost could void the authority to operate this equipment.

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# Warranty

## 30 DAY MONEY-BACK GUARANTEE

All WilsonPro products are protected by WilsonPro 30-day money-back guarantee. If for any reason the performance of any product is not acceptable, simply return the product directly to the reseller with a dated proof of purchase.

## 3 YEAR WARRANTY

WilsonPro Amplifiers are warranted for three (3) years against defects in workmanship and/or materials. Warranty cases may be resolved by returning the product directly to the reseller with a dated proof of purchase.

Signal Amplifiers may also be returned directly to the manufacturer at the consumer's expense, with a dated proof of purchase and a Returned Material Authorization (RMA) number supplied by WilsonPro. WilsonPro shall, at its option, either repair or replace the product.

This warranty does not apply to any Signal Amplifiers determined by WilsonPro to have been subjected to misuse, abuse, neglect, or mishandling that alters or damages physical or electronic properties.

Replacement products may include refurbished WilsonPro products that have been recertified to conform with product specifications.

RMA numbers may be obtained by contacting Customer Support.

DISCLAIMER: The information provided by WilsonPro is believed to be complete and accurate. However, no responsibility is assumed by WilsonPro for any business or personal losses arising from its use, or for any infringements of patents or other rights of third parties that may result from its use.

MARKETING APPROVAL: Installer and end customer hereby grants to Wilson Electronics the express right to use installers or end customers company logo in marketing, sales, financial, and public relations materials and other communications solely to identify Customer as a Wilson Electronics customer.

## Notes

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## Notes

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For patents go to: weboost.com/us/patents

NOT AFFILIATED WITH WILSON ANTENNA