WILSONPRO™

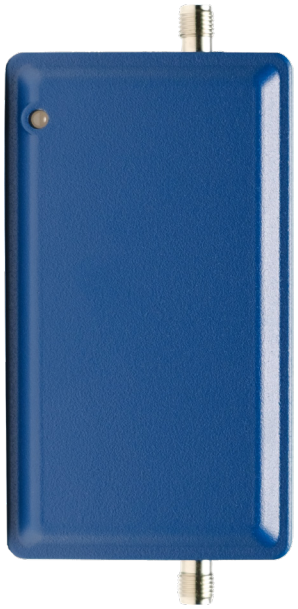
IoT 2-Band

SKU: 460209, 460109, 460309

FEATURES

- Designed to link with a data modem as a direct-connect amplifier
- Improves overall cellular connectivity in weak signal environments
- Configurable to almost any Internet of Things (IoT) installation
- Pre-approved by all major cell carriers under FCC “part 20” rules
- Bi-directional amplification boosts signals to and from cell towers
- Auto-power control to help ensure maximum signal output

*⚠**WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov.



Kits Include

460209* Basic Kit	Pro IoT 2-Band Amplifier	Mounting Bracket 901138	Mini Magnet Antenna 301126	5V / 4A A/C Power Supply 859969	6’ RG174 w/ SMA Male to SMA Male Cable 951141
460109* 12” Antenna	Pro IoT 2-Band Amplifier	Mounting Bracket 901138	Outside 12” Magnet Antenna 311125	5V / 4A A/C Power Supply 859969	6’ RG174 w/ SMA Male to SMA Male Cable 951141
460309* Hardwire Kit	Pro IoT 2-Band Amplifier	Mounting Bracket 901138	Mini Magnet Antenna 301126	12V DC to 5V DC 1A, Hardwired DC Jack 859989	6’ RG174 w/ SMA Male to SMA Male Cable 951141

About

The **WilsonPro IoT 2-Band** is a “Direct-Connect” solution for cellular network capable equipment and IoT devices. Compatible with U.S. carrier networks using Band 5 (850 MHz) and Band 25/2 (1900 MHz), it connects directly with cellular modems to provide strong, reliable cell signal for successful data transfer.

The IoT 2-Band is offered in three different kit options:

- The basic kit; ideal for ATMs, vending machines, or movie-rental kiosks with access to AC power outlets.
- The 12” antenna kit, pairing the IoT 2-Band amplifier with Wilson’s #1 selling oversized magnet antenna.
- The hardwire kit with DC power supplied by a vehicle to amplify cell signal for an LTE-modem hotspot.

The IoT 2-Band’s compact form factor is ideal for custom-designed IoT communication systems built within tightly constrained spaces. FCC certified, the IoT 2-Band allows OEMs to source a compact, powerful, and highly compatible cell signal amplifier that comes ready to deploy. In locations where cellular connectivity is adversely affected by distance to cell towers, terrain obstructions, or building materials (like concrete and steel), the IoT 2-Band is a proven go-to solution.

Specifications

MODEL NUMBER	460209 (basic kit) 460109 (12” antenna kit) 460309 (hardwire kit)
FREQUENCIES	Band 5 850 MHz Band 25/2 1900 MHz
MAX GAIN	15 dB
MAX UPLINK POWER	24 dBm
MAX DOWNLINK POWER	-3 dBm
IMPEDANCE	50 Ohm
POWER	110/240Vac, 50Hz/60Hz, 5VDC-2A
CONNECTORS	SMA Female
AMPLIFIER DIMENSIONS	0.75 x 1.75 x 4 in
AMPLIFIER WEIGHT	0.175 lbs

WILSONPRO™

Detailed Specifications

	Pro IoT 2-Band	
SKU	460109	
Model Number	460009	
FCC Number	PWO460009	
Connectors	SMA-Female	
Antenna Impedance	50 Ohms	
Frequency	824-894 MHz & 1850-1995 MHz	
Passband Gain (nominal)	**800 MHz** 13.4	**1900 MHz** 12.3
20 dB Bandwidth (MHz)	**800 MHz**	**1900 MHz**
Typical Maximum	41.7 43.3	84.1 88.9
Power output for single cell phone (dBm)	**800 MHz**	**1900 MHz**
Uplink Downlink	23.8 -6.05	22.3 -6.3
Power output for multiple received channels (Uplink) dBm **No. Tones**	**800 MHz**	**1900 MHz**
2	24.1	23.2
3	20.5	19.6
4	18.0	17.1
5	16.1	15.2
6	14.5	13.6
Power output for multiple received channels (Downlink) dBm **No. Tones**	**800 MHz**	**1900 MHz**
2	-3.2	-4.7
3	-6.7	-8.2
4	-9.2	-10.7
5	-11.1	-12.7
6	-12.7	-14.2
Noise Figure (typical downlink/uplink)	4 dB (nominal)	
Isolation	> 60 dB	
Power Requirements	110/240Vac, 50Hz/60Hz, 5VDC-2A	

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The Manufacturer's rated output power of this equipment is for single carrier operation. For situations when multiple carrier signals are present, the rating would have to be reduced by 3.5 dB, especially where the output signal is re-radiated and can cause interference to adjacent band users. This power reduction is to be by means of input power or gain reduction and not by an attenuator at the output of the device.

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.

ASSEMBLED IN THE USA

Package Dimensions

	LENGTH	WIDTH	HEIGHT	WEIGHT	MASTER PACKAGE DIMENSIONS
460209	4.75"	7.75"	3.25"	0.965 lb	QTY 30 / 24.9" x 16.55 "x 14.5" / 30 lb
460109	2.25"	12.75"	6.25"	1.170 lb	QTY 25 / 24.9" x 16.55" x 14.5" / 33 lb
460309	7.75"	4.75"	3.50"	1.020 lb	QTY 45 / 24.9" x 16.55 "x 14.5" / 52 lb

FOR PARTNER'S USE

Support

3 Year Warranty from Purchase

Website: www.wilsonpro.com/support

Phone: +1 866 294 1660
Monday to Saturday

UPC

460209

8 11815 02517 7

460109

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460309

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