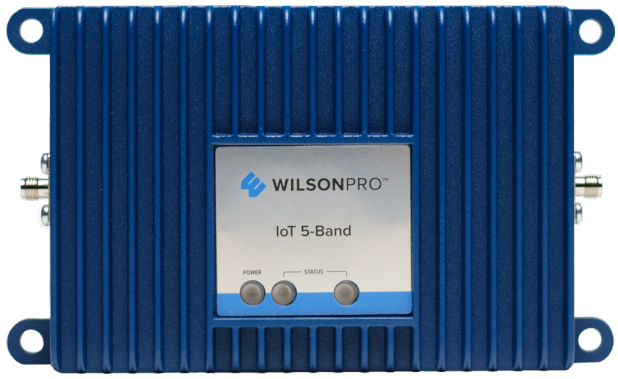
WILSONPRO™

IoT 5-Band

SKU: 460119, 460219, 461119



PASSIVE RF BYPASS

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
- **Passive RF bypass failover** keeps modem going if power is lost
- Auto-power control to help ensure maximum signal output

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

Kits Include

460119* Basic Kit	Pro IoT 5-Band Amplifier	Mini Magnet Antenna 301126	AC/DC 5V/4A Power Supply 850012	6’ RG174 w/ SMA Male to SMA Male Cable 951141				
460219* Hardwire Kit	Pro IoT 5-Band Amplifier	Mini Magnet Antenna 301126	12V DC to 6V DC 2A, Hardwire DC Jack 859923	6’ RG174 w/ SMA Male to SMA Male Cable 951141				
461119* Security Kit	Pro IoT 5-Band Amplifier	Omni Antenna 304422	12’ Adapter w/MMCX 951153	MMCX right angle to SMA Female Bulk head connector w/12” RG316 cable 951154	10’ RG58 SMA Male to SMA Male 955834	30’ RG58 SMA Male to N Male 955833	AC/DC 5V/4A Power Supply 850012	

About

The **WilsonPro IoT 5-Band** is a “Direct-Connect” solution for cellular network capable equipment and IoT devices. Compatible with all U.S. carrier networks, the IoT 5-Band connects directly with cellular modems and provides strong, reliable cell signal to guarantee successful IoT data transfer.

The IoT 5-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 hardwire kit with DC power supplied by a vehicle to amplify cell signal for an LTE-modem hotspot.
- The security kit with MMCX cables to interface with cellular-based home or business security systems.

The IoT 5-Band’s compact form factor is ideal for custom-designed IoT communication systems built within tightly constrained spaces. FCC certified, the IoT 5-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 5-Band is a proven go-to solution.

Specifications

MODEL NUMBER	460119 (basic kit) 460219 (hardwire kit) 461119 (security)
FREQUENCIES	Band 12 700 MHz Band 13 700 MHz Band 5 850 MHz Band 4 1700/2100 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-5A
CONNECTORS	SMA Female
AMPLIFIER DIMENSIONS	1.25 x 3.5 x 6.25 in
AMPLIFIER WEIGHT	1.085 lbs

WILSONPRO™

Detailed Specifications

	Pro IoT 5-Band				
SKU	460119				
Model Number	460019				
FCC ID	PWO460019				
Connectors	SMA				
Antenna Impedance	50 Ohms				
Frequency	698-716 MHz, 746-787 MHz, 824-894 MHz, 1850-1995 MHz, 1710-1755/2110-2155 MHz				
Passband Gain (typical)	**700MHz Band12/17** 11.8	**700MHz Band13** 11.0	**800MHz** 10.0	**1700/2100MHz** 7.1	**1900MHz** 8.6
20 dB Bandwidth (MHz)	**700MHz Band12/17**	**700MHz Band13**	**800MHz**	**1700/2100MHz**	**1900MHz**
Typical	29.5	31.6	38.4	81.8	75.4
Maximum	33.9	33.9	40.6	85.4	77.4
Power output for single cell phone (Uplink) dBm	**700MHz Band12/17**	**700MHz Band13**	**800MHz**	**1700MHz**	**1900MHz**
	24.7	24.9	24.1	25.6	25.0
Power output for single cell phone (Downlink) dBm	**700MHz Band12/17**	**700MHz Band13**	**800MHz**	**2100MHz**	**1900MHz**
	-6.3	-6.5	-6.5	-7.7	-5.8
Power output for multiple received channels (Uplink) dBm **No. Tones**	**700MHz Band12/17**	**700MHz Band13**	**800MHz**	**1700MHz**	**1900MHz**
2	26.1	25.8	21.0	21.3	21.9
3	22.6	22.3	17.5	17.8	18.4
4	20.1	19.8	15.0	15.3	15.9
5	18.1	17.8	13.0	13.4	13.9
6	16.5	16.3	11.5	11.8	12.3
Power output for multiple received channels (Downlink) dBm **No. Tones**	**700MHz Band12/17**	**700MHz Band13**	**800MHz**	**2100MHz**	**1900MHz**
2	-6.0	-5.9	-5.7	-6.8	-6.0
3	-9.5	-9.4	-9.2	-10.3	-9.5
4	-12.0	-11.9	-11.7	-12.8	-12.0
5	-14.0	-13.9	-13.7	-14.7	-14.0
6	-15.5	-15.4	-15.2	-16.3	-15.5
Noise Figure	5 dB nominal				
Isolation	> 40 dB				
Power Requirements	110/240Vac, 50Hz/60Hz, 5VDC-5A				

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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
460119	10.38"	5.25"	2.25"	2.020 lb	QTY 25 / 24.9" x 16.55" x 14.5" / 65 lb
460219	10.75"	5.25"	2.25"	1.865 lb	QTY 25 / 24.9" x 16.55 "x 14.5" / 50 lb
461119	16.00"	4.00"	4.00"	4.585 lb	QTY 15 / 24.9" x 16.55 "x 14.5" / 72 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

460119
8 11815 02077 6

460219
8 11815 02654 9

461119
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