# **Unication One-Way Signal Booster**

**Booster Designed for Public Safety** 



## **One-Way Signal Booster**

## **Boosts ALL Public Safety Bands:**

VHF. UHF and 700-800MHz

## **Supports Multiple System Types:**

Analog 2-Tone, P25 Conventional & P25 Trunking

#### **Powerful & Cost-Effective Solution**

Delivers Crucial In Building Signal Coverage

**Works on Voice Pagers & Radio Devices** 

**Ease & Convenience of User Installation** 

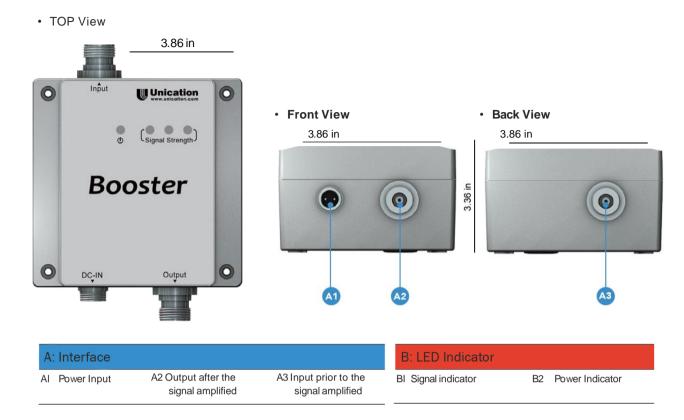




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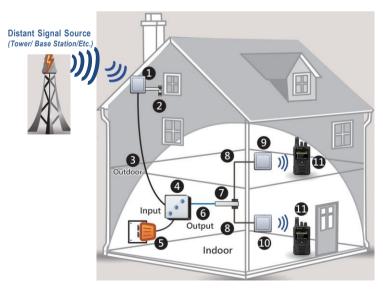
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## **Introduction: One-Way Signal Booster**



### **One-Way Booster System Integration Diagram:**

In the example diagram below, the One-Way Signal Booster uses a co-axial power divider to direct output (2) two separate indoor antennas which are installed on the first and second floors to provide an expanded coverage area throughout the two-story structure.



- 1. Outdoor Antenna (Directed toward signal source)
- 2. Supporting Arm (antenna mount/bracket)
- 3. Coaxial Cable (connects outdoor antenna to Booster input)
- **4.** One-Way Signal Booster (3.9 x 3.9 x 2.39 in)
- 5. Booster Power Adapter (connected to power source/wall outlet)
- **6.** Coaxial Cable (connects Booster output to power divider input)
- 7. Power Divider/Splitter (1 input/2 output connectors)
- **8.** Coaxial Cable (connects power divider to indoor antennas)
- 9. Indoor Antenna #1 (radiates boosted signal out to all receiving radio devices within 2nd floor indoor coverage area)
- **10.** Indoor Antenna #2 (radiates boosted signal out to all receiving radio devices within the ground floor indoor coverage area)
- **11.** Radio receiving devices within boosted coverage area (G-Series Voice Pagers, 2-Way Radios, Portables and any other radio receiver)

NOTE: Adequate signal must be available outside the structure to achieve in-building coverage.

## **Technical Specifications**

Product Specific	cations	
Product Name	One-Way Signal Booster	
System Protocols Supported	Analog 2-Tone, P25 Conventional, P25 Phase I, P25 Phase II	
Frequency Ranges	VHF/UHF: 136-174MHz & UHF 400-520MHz 700/800: 763-776MHz, 794-806MHz, 851-870MHz, 806-824MHz 700: 763-776MHz, 794-806MHz, 800: 851-870MHz, 806-824MHz	
Largest Gain	78 dB	
Environment and Ter	nperature for the Device	
Device Temperature		-22°F- +158°F
Hardware Specification	ons	
Shell Material		Aluminum Alloy
Weight (w/o accessories)		580 g
Dimensions (Inc. Cable Connector)	Height (Unit: mm)	135 mm
	Width (Unit: mm)	98 mm
	Thickness (Unit: mm)	60 mm
Optional Accessories	Omni-Directional Indoor Antenna	+2 dBi
	Yagi 18dB Gain External Antenna	+18 dBi
	LMR400 RF Coaxial Cable (10 meter)	Cable Loss 3 dB
	Antenna Bracket	243 mm* 60.30 mm* 25.14 mm
	Power Divider	97 mm * 110 mm * 51 mm
Device Capabilities	Gain Switching	Yes
	Frequency Band Switching	Yes
Characteristics and S	pecifications	
Gain Settings	Manually set as High Gain or Low Gain	High Gain: 78 dB Low Gain: 60 dB
Automatic Gain Control (AGC)		30 dB
Noise Figure		<4 dB
Booster Connector		N-Female Coax
Impedance		50 Ohm
Connection Type		Coax
Recommended Cable		LMR400 Coax or equivalent



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