

# Component Specifications

## AXT630, AXT631 Antenna Distribution Systems

### Overview

Antenna Distribution Systems send the RF signal from a single pair of antennas to multiple receivers. Ultra-linear amplification and adjustable attenuation optimize performance in difficult RF environments. Selectable input filters match the available frequency bands of transmitters, providing extra protection from strong out-of-band signals. BNC antenna output pairs distribute band-filtered signal to up to 4 receivers. A pair of wideband cascade ports supplies a wideband RF signal to Spectrum Managers or additional antenna distribution amplifiers. Networking enables Wireless Workbench® 6 system control of filtering ranges and attenuation. To maximize use of available RF spectrum, two models of the Antenna Distribution System are available. The AXT630 covers a frequency range of 470-698 MHz and the AXT631 covers a frequency range of 606-814 MHz.

- Selectable input filtering provides system-wide protection against strong out-of-band signals
- Wideband filtering option covers multiple bands
- Up to 15 dB of selectable RF attenuation for signal-to-noise optimization
- Front panel interface and Wireless Workbench 6 software control provide easy setup and control of filtering, antenna power, and attenuation
- BNC outputs: 4 antenna output pairs
- Wideband RF cascade port with selectable 3 dB make-up gain for connecting wideband devices
- Ethernet Networking: 2 PoE enabled Ethernet ports
- IEC power ports enable daisy-chaining of AC power

### Product Specifications

Dimensions	44 mm x 483 mm x 366 mm (1.7 in. x 19.0 in. x 14.4 in.), H x W x D	
Weight	4.6 kg (10.1 lbs)	
Housing	Steel; Extruded aluminum	
Operating Temperature Range	-18°C (0°F) to 63°C (145°F)	
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F)	
Power Requirements	100 to 240 V AC, 50-60 Hz	
Current Drain	1.0 A RMS (referenced at 120 V AC)	
<b>RF Input</b>		
Connector Type	BNC	
Configuration	Unbalanced, active	
Band Filters	AXT630:	Wideband: 470–698 MHz Band G1: 470–530 MHz Band H4: 518–578 MHz Band J5: 578–638 MHz Band L3: 638–698 MHz
	AXT631:	Wideband: 606–814 MHz Band K4E: 606–666 MHz Band M8: 666–730 MHz Band P8, P9: 710–790 MHz Band Q5: 740–814 MHz
Impedance	50 Ω	
Bias Voltage	12 V DC, 150 mA (300 mA maximum)	
RF Frequency Range	AXT 630: 470–698 MHz AXT 631: 606–814 MHz	
<b>Distribution Output</b>		
Connector Type	BNC (4 pairs)	
Configuration	Unbalanced, active	
Impedance	50 Ω	
Gain Adjustment Range	Cascade Enabled: -15 dB to 0 dB (In 1 dB steps) Cascade Disabled: -12 dB to +3 dB (In 1 dB steps)	
Output Intercept Point	>25 dBm, typical	
<b>Cascade Output</b>		
Connector Type	BNC (1 pair)	
Configuration	Unbalanced, wideband	
Impedance	50 Ω	
Insertion Loss	<5 dB	
<b>Networking</b>		
Power Over Ethernet (PoE)	50 V DC, Class 1	
Network Interface	Dual Port Ethernet 10/100 Mbps	
Network Addressing Capability	DHCP or Manual IP address	



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## Included Components

UA802	2-foot Coaxial Antenna Cable (RG-58) (12)
95A9128	IEC AC Power Cable (1)
95A9129	IEC AC Extension Cable (1)
C803	Shielded 3-foot Ethernet Cable (1)
C8006	Shielded 8-inch Ethernet Jumper Cable (1)
90XN1371	Hardware Kit (1)
95B9023	22-inch Coaxial Cable* (1)
95C9023	33-inch Coaxial Cable* (1)

\* with integrated bulkhead for front mounting antennas.

## Optional Accessories

### 1/2 Wave Antennas

UA820G	744-865 MHz
UA820H4	690-746 MHz
UA820J	554-590 MHz
UA820K	606-666 MHz
UA820L3	638-698 MHz
UA820M	694-758 MHz
UA820Q	740-814 MHz
UA820P8	710-790 MHz

### Antennas

UA860SWB	Passive Omnidirectional Antenna (470-1100 MHz)
PA805SWB	Passive Directional Antenna (470-952 MHz)
HA-8089	PWS Helical Antenna (480-900 MHz)

### In-Line RF Amplifiers

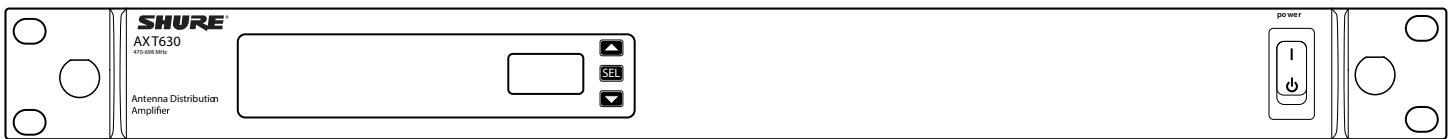
UA830WB	470-900 MHz
UA830USTV	470-698 MHz

### Active Directional Antennas

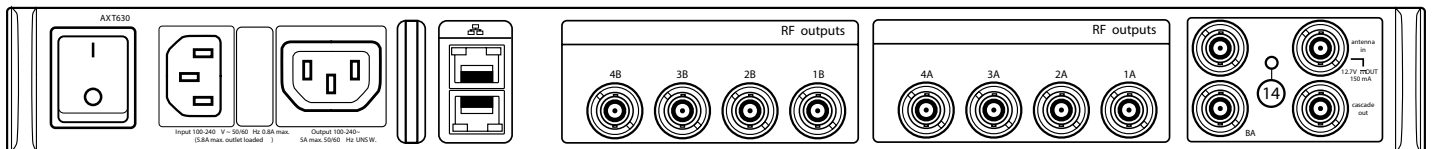
UA870WB	470-900 MHz
UA870USTV	470-698 MHz

### Cables

UA825	25-foot Coaxial Cable RG8/X
UA850	50-foot Coaxial Cable RG8/X
UA8100	100-foot (30.4 m) Antenna Extension Cable



AXT630 Antenna Distribution System Front



AXT630 Antenna Distribution System Back

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