

# VHF/UHF Antennas

## BTY Series

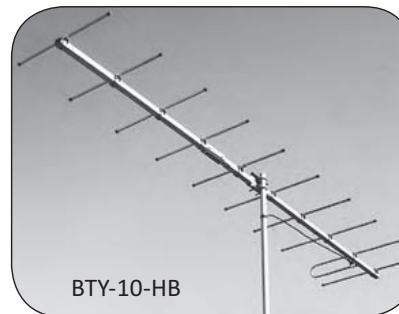
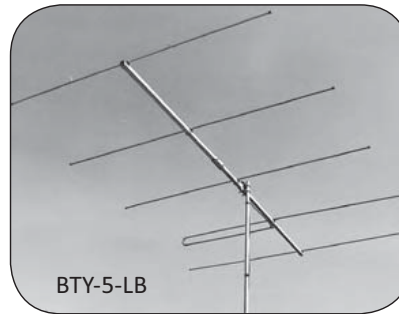
HD  
READY!

The BTY Series of professional quality antennas include single channel and broadband models designed for a variety of UHF and VHF applications. The BTY Series features high gain, narrow beamwidth, and low side lobes.

All models can be shipped via UPS to reduce freight and handling costs. Square boom construction and end-sealed aluminum elements provide added strength, excellent wind resistance and exceptional weathering properties. On VHF models, the heavy duty mounting bracket is positioned at the antenna's center of gravity for balanced mounting to the mast. An optional cantilever mounting bracket (Stock No. 5760) is required for VHF antenna end mount installations. This optional mount permits attaching the VHF antenna to either a horizontal or vertical tower member. All UHF models are designed for end mounting due to their smaller physical size. The BTY Series Antennas can accommodate a maximum mast size of 2.5" O.D. (outside diameter). All models are 75  $\Omega$  impedance with an "F" connector.

### VHF Features & Benefits

- High Gain, Low Sidelobes
- Foam-Filled Elements Dampen Vibration
- Cantilever Mounts Available



### Specifications

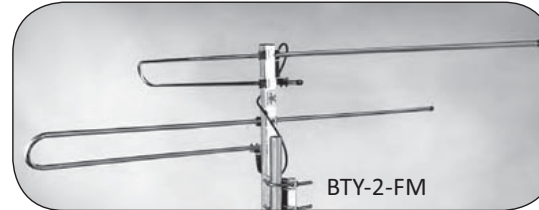
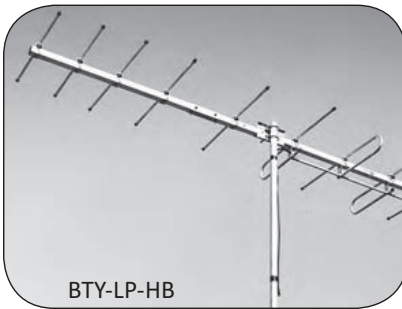
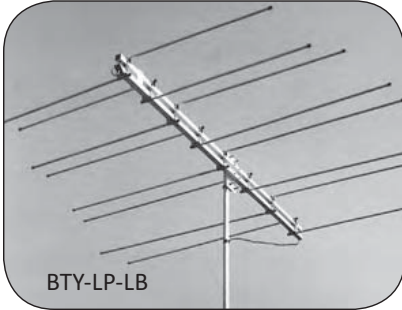
Model: BTY-5-LB BTY-10-HB													
VHF Single Channel:	2	3	4	5	6	FM	7	8	9	10	11	12	13
Bandwidth (MHz):	8	8	8	8	8	23	8	8	8	8	8	8	8
Gain (dBi):	9.2	9.2	9.2	9.2	9.2	9.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
3 dB Beamwidth Horizontal (Degrees):	63	63	63	63	63	63	51	51	51	51	51	51	51
Front to Back Ratio (dB):	17	17	17	17	17	17	17	17	17	17	17	17	17
Return Loss (dB):	12	12	12	12	12	12	17	17	17	17	17	17	17
Impedance:	75 $\Omega$												
Connector:	"F" Female												
Number of Elements:	5	5	5	5	5	6	10	10	10	10	10	10	10
Boom Length (Inches):	128	116	105	96	96	120	131	126	122	118	115	110	106
Max Element Width (Inches):	106	97	85	75	71	64	33	32	32	31	31	29	28
Boom Material:	6063-T6 Alum. Tube 1.25" square, 0.062" wall												
Element Material:	6063-T52 Alum. Tube 0.5" round, 0.049" wall												
Max Cross Sectional Area (sq. ft.):	1.56	1.45	1.35	1.28	1.2	1.45	1.48	1.43	1.4	1.35	1.33	1.28	1.25
Wind Resistance @ 100 MPH (No Ice, in lbs.):	49.84	45.67	41.85	38.73	38.73	47.06	52.56	50.83	49.44	48	47	45	43.88
Antenna Weight (lbs.):	10.2	9.89	9.36	8.86	8.61	9.61	9.61	9.49	9.37	8.86	8.99	8.74	8.61
Maximum Shipping Weight (lbs.):	13.25												

Specifications and Ordering Information are located on the following pages.

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### ○ Broadband Features & Benefits

- High Gain, Low Sidelobes
- Foam-Filled Elements Dampen Vibration
- Cantilever Mounts Available
- BTY-LP-BB joins with BTY-UHF-BB for complete VHF/UHF Antenna (requires U/V mounting kit # 4882)

### ○ FM Features & Benefits

- Full 88-108 MHz Coverage
- 360 Degree Beamwidth

### ○ Specifications

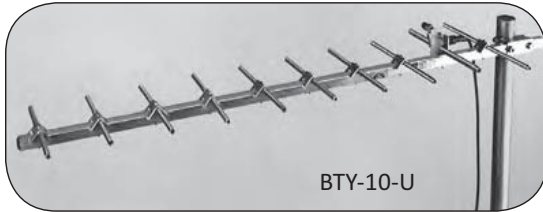
Model:	BTY-LP-LB	BTY-LP-HB	BTY-LP-BB	BTY-2-FM
Band	LB	HB	BB	FM
VHF Channel:	2 to 6	7 to 13	2 to 13	FM
Bandwidth (MHz):	55-88	174-216	54-88; 174-216	88-108
Gain (dBi):	9	12.2	8.2	2.2
3 dB Beamwidth Horizontal (Degrees):	57	50.5	70	360
Front to Back Ratio (dB):	22	20	18	N/A
Return Loss (dB):	14	12	12	12
Impedance:	75 $\Omega$			
Connector:	"F" Female			
Number of Elements:	8	10	12	2
Boom Length (Inches):	86	104	96.4	18
Max Element Width (Inches):	109.13	35.5	114.13	59
Boom Material:	6063-T6 Alum. Tube 1.25" square, 0.062" wall			
Element Material:	6063-T52 Alum. Tube 0.5" round, 0.049" wall			
Max Cross Sectional Area (sq. ft.):	1.9	1.3	2	0.463
Wind Resistance @ 100 MPH (No Ice, in lbs.):	76.2	52	80	-
Shipping Weight (lbs.):	15.25	13.25	17.75	3

Specifications and Ordering Information are located on the following page.

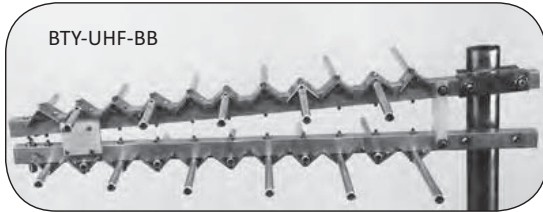
# VHF/UHF Antennas

BTY Series

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BTY-10-U



BTY-UHF-BB

## UHF Features & Benefits

- High Gain, Low Sidelobes
- BTY-UHF-BB Joins with BTY-LP-BB for a Combined U/V Antenna
- HDTV Compatible
- Rear Mount Simplifies Tower Mounting

## Specifications

UHF	BTY-UHF-BB						UHF
Model: BTY-10-U							
Band	A	B	C	D	E	F	
Channels:	(14-19)	(20-26)	(27-34)	(35-44)	(45-56)	(57-69)	14 to 69
Bandwidth (MHz):	470-506	506-548	548-596	596-656	656-728	728-806	470-860
Gain (dBi):	12.2	14.2	13.2	12.2	12.2	12.2	10.2
3 dB Beamwidth (Horizontal Degrees):	46	46	46	46	46	46	62
Front to Back Ratio (dB):	21	16	19	20	18	14	18
Return Loss (dB):	18	16	18	16	15	14	12
Impedance:	75 $\Omega$						
Connector:	"F" Female						
Number of Elements:	10	10	10	10	10	10	11
Boom Length (Inches):	48.58	48	44.06	42.94	39	37.88	24
Max Element Width (Inches):	12.88	12.44	11	10.5	10	9.13	13
Boom Material:	6063-T6 Alum. Tube 0.75" Square, 0.062" Wall						
Element Material:	6063-T52 Alum. Tube 0.375" Round, 0.049" Wall (Dipole .5" Round, 0.049 Wall)						
Max Cross Sectional Area (sq. ft.):	0.468	0.468	0.468	0.468	0.468	0.468	0.341
Wind Resistance @ 100 MPH (No Ice, in lbs.):	16.52	16.52	16.52	16.52	16.52	16.52	13.6
Shipping Weight (lbs.):	4.25	4.25	4.25	4.25	4.25	4.25	5.38

## Ordering Information

Model	Stock No.	Description
BTY-5-LB	4866-xx	Antenna Single Channel Low-Band VHF/FM, 5 Elements, 54-88/88-108 MHz
BTY-10-HB	4867-xx	Antenna Single Channel High-Band VHF, 10 Elements, 174-216 MHz
BTY-LP-HB	4871	Antenna Broadband High-Band VHF, 10 Elements, 174-216 MHz
BTY-LP-LB	4872	Antenna Broadband Low-Band VHF, 8 Elements, 55-88 MHz
BTY-10-U	4873-xx	Antenna Single Channel UHF, 10 Elements, 470-806 MHz
BTY-LP-BB	4874	Antenna Broadband VHF, 12 Elements, 54-88/174-216 MHz
BTY-UHF-BB	4875	Antenna Broadband UHF Antenna, 11 Elements, 470-890 MHz
BTY-2-FM	4878	Antenna Omnidirectional FM, 2 Elements, 88-108 MHz
BTY-UVMK	4882	BTY Series U/V Mounting Kit