

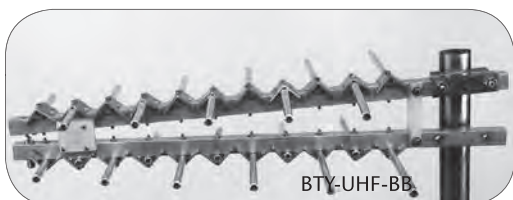
BTY SERIES

SINGLE CHANNEL VHF/ UHF ANTENNAS



○ 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



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 Ohm impedance with an "F" connector.

○ Features & Benefits

- Full 88-108 MHz Coverage
- 360 Degree Beamwidth



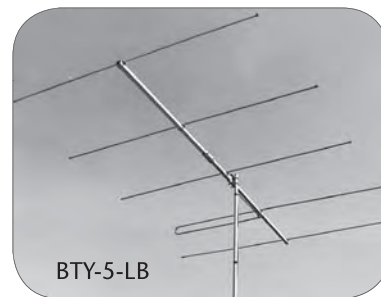
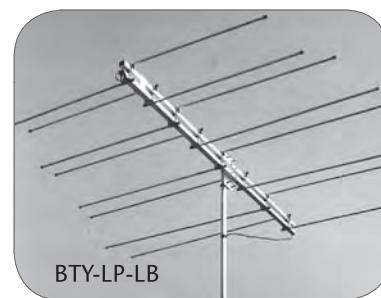
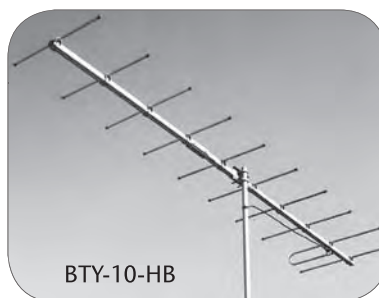
○ Features & Benefits

- High Gain, Low Sidelobes
- Foam-Filled Elements Dampen Vibration
- Cantilever Mounts Available
- Joins With BTY-UHF-BB For Complete VHF/UHF Antenna



○ Features & Benefits

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



Single Channel VHF/UHF Antennas

BTY Series

○ 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 Ohms												
Connector:	F Connector												
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												

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 Ohms			
Connector:	F Connector			
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

Single Channel VHF/UHF Antennas

BTY Series

Reception

○ Specifications

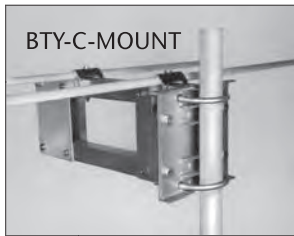
UHF Model: Band Channel:	BTY-10-U						BTY-UHF-BB UHF 14 to 69
	A (14-19)	B (20-26)	C (27-34)	D (35-44)	E (45-56)	F (57-69)	
Bandwidth (MHz):	470-506	506-548	548-596	596-656	656-728	728-806	470-860
Gain dBi:	12.2	14.2	13.2	12.2	12.2	12.2	10.2
3 dB Beamwidth (horizontal) Degrees:	46	46	46	46	46	46	62
Front to Back Ratio (dB):	21	16	19	20	18	14	18
Return Loss:	18	16	18	16	15	14	12
Impedance:	75 Ohms						
Connector:	F Connector						
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, 54-88/88-108MHz
BTY-10-HB	4867-xx	Antenna Single Channel High-Band VHF, 10 Elements, 174-216MHz
BTY-LP-HB	4871	Antenna Broadband High-Band VHF, 10 Elements, 174-216MHz
BTY-LP-LB	4872	Antenna Broadband Low-Band VHF, 8 Elements, 55-88MHz
BTY-10-U	4873-xx	Antenna Single Channel UHF, 10 Elements, 470-806MHz
BTY-LP-BB	4874	Antenna Broadband VHF, 12 Elements, 54-88/174-216MHz
BTY-UHF-BB	4875	Antenna Broadband UHF Antenna, 11 Elements, 470-890MHz
BTY-2-FM	4878	Antenna Omnidirectional FM, 2 Elements, 88-108MHz

Antenna Mounts

BTY Series



BTY-C-MOUNT

○ Features & Benefits

- Cantilever Mount Makes VHF BTY Series Antennas End Mounted
- Vertical or Horizontal Mounting

○ Features & Benefits

- Stainless Steel Antenna Mounting Clamp
- Used For Stacking BTY Series Antennas



BTY-MC

Antenna Mounts

The BTY-C-MOUNT consists of a heavy duty square aluminum boom and all clamping hardware required for rear mounting of VHF Antennas; BTY-5-LB, BTY-10-HB, BTY-LP-LB, BTY-LP-HB and BTY-LP-BB. Cantilever end-mounting is commonly used since the antennas are usually attached to tower legs rather than to masts. The BTY-C-Mount provides antenna mounting to a horizontal or vertical tower leg or mast 1.25" to 2.5" OD.

The BTY-MC is a heavy duty, stainless steel 90 degree mounting clamp designed to fasten up to 2.5" OD tower legs or masts. They are used in constructing BTY Series antenna arrays for applications requiring increased gain and directivity.

○ Specifications

BTY-C-MOUNT

Mechanical

- Boom: 6063-T6 Alum. Tube
1.25" Square, 0.062" Wall
- Boom Length: 63.38 in.
- Mounting Plates and Brackets:
14 Gauge (0.074") Stainless Steel
- Max. Cross Sectional Area: 0.88 Square Feet
- Wind Resistance (@100 mph): 58.2 lbs
- Shipping Weight: 8.31 lbs, 3.78 kg

BTY-MC

Mechanical

- Material: Stainless Steel
- Mount Dimensions (WxHxD):
6 x 6 x 1.38 in.
152 x 152 x 35 mm
- U-Bolts
Quantity: 4
Size: 0.38 in. diameter
- Maximum Tubing Size: 2.5 in. OD
- Shipping Weight: 2.5 lbs, 1.14 kg

○ Ordering Information

Model	Stock No.	Description
BTY-C-MOUNT	5760	Antenna Mount Cantilever Style
BTY-MC	4879	Antenna Mounting Clamp Stacking Frame