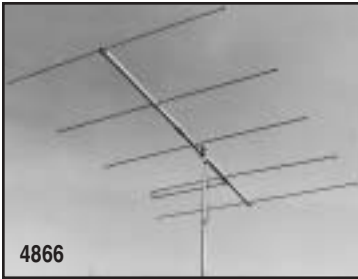
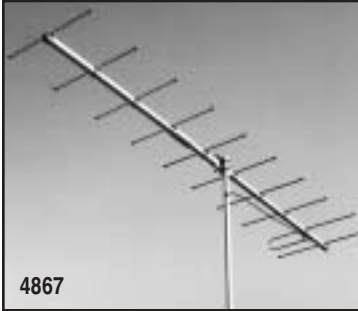


BTY Series BTY Single Channel VHF/UHF Antennas

Reception



4866



4867



4873

ORDERING INFORMATION:

BTY-5-LB
Stock No. 4866 ⁽²⁾

BTY-10-HB
Stock No. 4867 ⁽²⁾

FEATURES:

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

ORDERING INFORMATION:

BTY-10-U
Stock No. 4873 ⁽²⁾

FEATURES:

- High Gain, Low Sidelobes
- Rear Mount Simplifies Tower Mounting

**BTY-5-LB, BTY-10-HB
VHF ANTENNAS**

The BTY Single Channel Antenna Series includes professional quality, single channel antennas designed for a variety of VHF applications. The BTY-5-LB covers low band VHF channels 2-6 using 5 antenna elements and the FM band using 6 antenna elements, while the BTY-10-HB covers high band VHF channels 7-13 using 10 antenna elements. The BTY Single Channel Antennas feature high gain, narrow beamwidth, and low side lobes for the desired channel.

These antennas are designed with a two piece boom allowing the antennas to 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. The heavy duty mounting bracket is positioned at the antenna's center of gravity for balanced mounting to the mast. These antennas can be rear mounted using a BTY-C-MOUNT Cantilever Antenna Mount. This style mount permits attaching the antenna to either the horizontal or vertical tower members. The BTY Series Antennas can accommodate a maximum mast size of 2.5" O.D. (outside diameter). These antennas feature a 75 Ω type "F" connector to provide feed on coaxial cable down leads.

SPECIFICATIONS

ELECTRICAL	BTY-5-LB	BTY-10-HB	Unit
Gain Over Isotropic:	9.2	13.2	dBi
Bandwidth:	8 (2-6)/23 (FM)	8 (7-13)	MHz
Beamwidth (-3 dB)			
Horizontal:	63	51	°
Vertical:	70	49	°
VSWR:	1.67:1	1.33:1	
Front to Back Ratio:	17.0	17.0	dB
Return Loss:	12.0	17.0	dB
Impedance:	75	75	Ω

MECHANICAL

MECHANICAL	COMMON	Unit
Boom:	6063-T6 alum. tube 1.25" square, 0.062" wall	
Elements:	6063-T52 alum. tube 0.5" round, 0.049" wall	
Element Mounting Clamp:	11 gauge alum. (0.090")	
Element Locknut Plate:	8 gauge alum. (0.125")	
Mast Mounting Bracket:	stainless steel	
Operational/Survival Wind Velocity:	125	mph
Output Connector:	Type "F", female, weather sealed	
Max. Mast Diameter (O.D.):	2.5	in.
Max. Shipping Size: (LxHxW)	79 x 4 x 6 201 x 10 x 15	in. cm
Maximum Shipping Weight:	13.25 6.02	lbs. kg

**BTY-10-U
UHF ANTENNA**

The BTY Single Channel Antenna Series includes professional quality, single channel antennas designed for a variety of VHF and UHF applications. The BTY-10-U covers UHF channels 14-69 using 10 antenna elements with individual channels being arranged into six channel groups. The BTY Single Channel Antennas feature high gain, narrow beamwidth, and low side lobes for the desired channel.

One piece, square boom construction and end-sealed aluminum elements provide added strength, excellent wind resistance and exceptional weathering properties. The heavy duty mounting bracket is positioned at the rear of the antenna for mounting directly to vertical tower members. This feature maximizes the signal reception qualities of the antenna by keeping the elements clear of support structures. The BTY Series Antennas can accommodate a maximum mast size of 2.5" O.D. (outside diameter). These antennas feature a 75 Ω type "F" connector to provide feed on coaxial cable down leads.

SPECIFICATIONS (BTY-10-U)

BAND	A	B	C	D	E	F	Units
ELECTRICAL							
Channels:	14-19	20-26	27-34	35-44	45-56	57-69	
Gain Over Isotropic:	12.2	14.2	13.2	12.2	12.2	12.2	dBi
Beamwidth (-3 dB) Hor.:	46.0	46.0	46.0	46.0	46.0	46.0	°
VSWR:	1.28:1	1.37:1	1.28:1	1.37:1	1.43:1	1.50:1	
Front to Back Ratio:	21	16	19	20	18	14	dB
Return Loss:	18	16	18	16	15	14	dB
Impedance:	75	75	75	75	75	75	Ω
MECHANICAL							
Boom Length:	48.56	48.00	44.06	42.94	39.56	37.88	in.
Reflector Width:	12.88	12.44	11.00	10.50	10.00	9.13	in.
Turning Radius:	46.06	45.50	41.56	40.44	37.06	35.38	in.

MECHANICAL	COMMON	Units
Boom:	6063-T6 alum. tube 0.75" square, 0.062" wall	
Number of Elements:	10	
ELEMENTS	COMMON	Units
Dipole:	6063-T52 alum. tube 0.5" round, 0.049" wall	
Reflector & Director:	6063-T52 alum. tube 0.38" round, 0.049" wall	
Element Mount. Clamp:	11 gauge alum. (0.090"), 2" x 1.31"	
Mast Mounting Bracket:	stainless steel	
Max. Cross Sectional Area:	0.468	sq. feet
Wind Resistance:	16.52 lbs @ 100 mph	
Operational/Survival Wind Velocity:	125	mph
Output Connector:	Type "F", female, weather sealed	
Max. Mast Diameter (O.D.):	2.5	in.
Max. Shipping Size: (LxHxW)	50 x 3.5 x 13.25 127 x 9 x 34	in. cm
Max. Shipping Weight:	4.25 1.93	lbs. kg

For more information on BTY-5-LB, and BTY-10-HB see chart on page B1-2

Ordering Notes: (1) Specify desired frequency. (2) Specify desired channel(s). (3) Specify desired option. (4) Specify desired isolation value or tap value.

Please Order by Stock Number!

BTY Series BTY Broadband VHF Antennas

B1-2

BTY-LP-LB, BTY-LP-HB BROADBAND VHF ANTENNAS

The BTY Broadband Antenna Series includes professional quality, broadband antennas designed for a variety of VHF applications. The BTY-LP-LB covers low band VHF channels 2-6 using 8 antenna elements, while the BTY-LP-HB covers high band VHF channels 7-13 using 10 antenna elements. The BTY Broadband Antennas feature high gain, narrow beamwidth, and low side lobes.

These antennas are designed with a two piece boom (assembled into one piece) allowing the antennas to 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. The heavy duty mounting bracket is positioned at the antenna's center of gravity for balanced mounting to the mast. These antennas can be rear mounted using a BTY-C-MOUNT Cantilever Antenna Mount. This style mount permits attaching the antenna to either the horizontal or vertical tower members. The BTY Series Antennas can accommodate a maximum mast size of 2.5" O.D. (outside diameter). These antennas feature a 75 Ω type "F" connector to provide feed on coaxial cable down leads.

SPECIFICATIONS

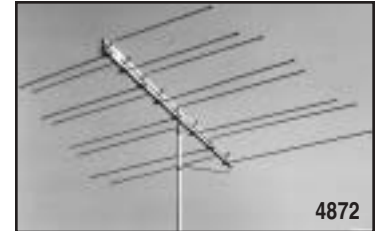
ELECTRICAL	BTY-LP-LB	BTY-LP-HB	Unit
Gain Over Isotropic:	9.0	13.2 (ch. 7) 12.2 (ch. 13)	dBi
Bandwidth:	55-88	174-216	MHz
Flatness Over Channel:	0.25	0.50	dB
Horizontal Beamwidth:	57.0	50.5 (ch. 7) 42.0 (ch. 13)	-3 dB
VSWR:	1.50:1	1.67:1	
Front to Back Ratio:	22.0	20.0	dB
Return Loss:	14.0	12.0	dB
Impedance:	75	75	Ω

MECHANICAL

Boom Length:	86.0	104.0	in.
Number of Elements:	8	10	
Max. Element Width:	109.13	35.50	in
Mast Mounting Bracket:	polyethylene, 0.375" thickness, 4.094" x 9"	stainless steel	
Turning Radius:	68.0	64.0	in
Max. Cross Sectional Area:	1.9	1.3	sq. ft.
Wind Resistance @100 mph:	76.2	52.0	lbs.
Shipping Size (LxHxW):	87.5 x 4.0 x 5.5 222 x 10 x 14	73.2 x 4.5 x 5.5 186 x 11 x 14	in cm
Shipping Weight:	15.40 7.00	13.25 6.02	lbs kg

MECHANICAL COMMON

Boom:	6063-T6 alum. tube 1.25" square, 0.062" wall
Elements:	6063-T52 alum. tube, 0.5" round, 0.049" wall
Element Mounting Clamp:	11 gauge alum. (0.090")
Locknut Plate:	8 gauge alum. (0.125")
Operational/Survival Wind Velocity:	125 mph
Output Connector:	Type "F", female, weather sealed
Max. Mast Diameter (O.D.):	2.5"



Reception



ORDERING INFORMATION:

BTY-LP-LB
Stock No. 4872

BTY-LP-HB
Stock No. 4871

FEATURES:

- High Gain, Low Sidelobes
- Foam Filled Elements
Dampen Vibration
- Short Boom Reduces Freight And
Handling Costs
- Cantilever Mount Available

BTY-5-LB, BTY-10-HB continued from page B1-1

Stock Number	Channel	Element Width (Max) (in.)	Boom Length (in.)	Maximum Cross Sectional Area (sq. feet)	Wind Resistance		Antenna Weight (lbs.)
					No Ice (lbs.)	0.5" Ice (lbs.)	
BTY-5-LB							
4866-2	2	106	128	1.56	49.84	66.16	10.20
4866-3	3	97	116	1.45	45.67	61.78	9.89
4866-4	4	85	105	1.35	41.85	56.44	9.36
4866-5	5	75	96	1.28	38.73	52.00	8.86
4866-6	6	71	96	1.20	38.73	52.00	8.61
4866-FM	FM	64	120	1.45	47.06	63.73	9.61
BTY-10-HB							
4867-7	7	33	131	1.48	52.56	70.27	9.61
4867-8	8	32	126	1.43	50.83	68.33	9.49
4867-9	9	32	122	1.40	49.44	66.38	9.37
4867-10	10	31	118	1.35	48.00	64.44	8.86
4867-11	11	31	115	1.33	47.00	63.00	8.99
4867-12	12	29	110	1.28	45.00	60.55	8.74
4867-13	13	28	106	1.25	43.88	58.60	8.61

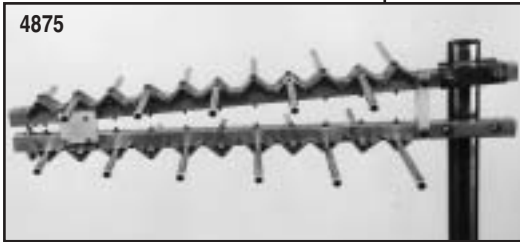


Toll Free For Ordering!
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BTY Series BTY Broadband VHF & UHF Antennas



4874



4875

ORDERING INFORMATION:

BTY-LP-BB
Stock No. 4874

FEATURES:

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

BTY-UHF-BB
Stock No. 4875

FEATURES:

- High Gain, Low Sidelobes
- Joins With BTY-LP-BB For Complete VHF/UHF Antenna

BTY-LP-BB BROADBAND VHF ANTENNA

The BTY Broadband Antenna Series includes professional quality, broadband antennas designed for a variety of VHF and UHF applications. The BTY-LP-BB covers VHF channels 2-6 and 7-13 using 12 antenna elements. The BTY Broadband Antennas feature high gain, flat response, narrow beamwidth, and low side lobes.

These antennas are designed with a shortened dual boom allowing the antenna to 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. The heavy duty mounting bracket is positioned at the antenna's center of gravity for balanced mounting to the mast. This antenna can be rear mounted using a BTY-C-MOUNT Cantilever Antenna Mount. This style mount permits attaching the antenna to either the horizontal or vertical tower members. The BTY Series Antennas can accommodate a maximum mast size of 2.5" O.D. (outside diameter). These antennas feature a 75 Ω type "F" connector to provide feed on coaxial cable down leads. The BTY-LP-BB has been fabricated to allow mounting the BTY-UHF-BB on the front of the antenna. Joining these two antennas will create one complete VHF/UHF broadband antenna.

BTY-UHF-BB BROADBAND UHF ANTENNA

The BTY Broadband Antenna Series includes professional quality, broadband antennas designed for a variety of VHF and UHF applications. The BTY-UHF-BB covers UHF channels 14-83 using 11 antenna elements. The BTY Broadband Antennas feature high gain, flat response, narrow beamwidth, and low side lobes.

The heavy duty mounting bracket is positioned at the rear of the antenna for mounting directly to vertical tower members. This feature maximizes the signal reception qualities of the antenna by keeping the elements clear of support structures. The BTY Series Antennas can accommodate a maximum mast size of 2.5" O.D. (outside diameter). These antennas feature a 75 Ω type "F" connector to provide feed on coaxial cable down leads. The BTY-UHF-BB has been fabricated to allow mounting on the front of the BTY-LP-BB antenna. Joining these two antennas will create one complete VHF/UHF broadband antenna.

SPECIFICATIONS ELECTRICAL

	BTY-LP-BB	BTY-UHF-BB	Units
Gain Over Isotropic:	8.2	10.2	dBi
Bandwidth:	54-88 and 174-216	470-890	MHz
Flatness Over Channel:	1.0	2.0	dB
Horizontal Beamwidth @-3 dB:	70	62	°
VSWR:	1.67:1	1.67:1	
Front to Back Ratio:	18.0	18.0	dB
Return Loss:	12.0	12.0	dB
Impedance:	75	75	Ω

MECHANICAL

Boom:	6063-T6 alum. tube, 1.25" square, 0.062" wall	6063-T6 alum. tube, 0.75" square, 0.062" wall	
Boom Length:	96.4	24.0	in.
Number of Elements:	12	11	
Elements:	6063-T52 alum. tube, 0.5" round, 0.049" wall	6063-T6 alum. tube, 0.375" round, 0.049" wall	
Max. Element Width:	114.13	13.00	in.
Element	11 gauge	11 gauge	alum.
Mounting Clamp:	(0.090") 2.0" x 0.94"	(0.090")	
Element	8 gauge alum	8 gauge alum.	
Locknut Plate:	(0.125")	(0.125")	
Mast Mounting Bracket:	polyethylene, 0.50" thickness	stainless steel	
Turning Radius:	75.0"	22.5"	
Maximum Cross Sectional Area:	2.0	0.341	sq. feet
Operational/Survival Wind Velocity:	125	125	mph
Wind Resistance @ 100 mph:	80.0	13.6 (no ice)	lbs.
Output Connector:	Type "F", female, weather sealed	Type "F", female, weather sealed	
Maximum Mast Diameter (O.D.):	2.5	2.5	in.
Shipping Weight:	17.75 (8.07)	5.38 (2.45)	lbs (kg)
Shipping Size (LxHxW):	87.5 x 4.0 x 5.5 (222 x 10 x 14)	27.75 x 5 x 15 (70 x 13 x 38)	in. (cm)

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