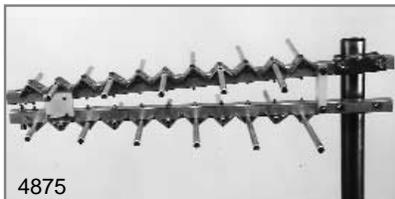
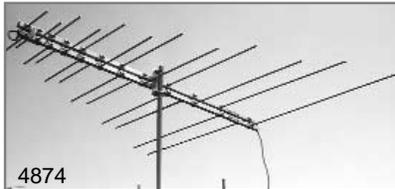


BTY Series Broadband

BTY VHF/UHF/FM Antennas & Antenna Mounts



BTY-LP-BB BROADBAND VHF ANTENNAS

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.

ORDERING INFORMATION: **BTY-UHF-BB BROADBAND UHF ANTENNA**

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

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

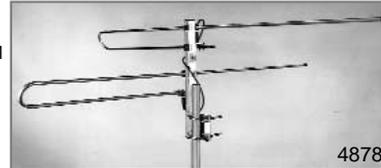
	BTY-LP-BB	BTY-UHF-BB	Units
Boom:	6063-T6 alum. tube, 1.25" square, 0.062" wall	6063-T6 alum. tube, 0.75" square, 0.062" wall	
Boom Length:	96.4	24.0	in
Number of Elements:	12	11	
Elements:	6063-T52 alum. tube, 0.5" round, 0.049" wall	6063-T6 alum. tube, 0.375" round, 0.049" wall	
Max. Element Width:	114.13	13.00	in
Element:	11 gauge	11 gauge	alum.
Mounting Clamp:	(0.090") 2.0" x 0.94"	(0.090")	
Element Locknut Plate:	8 gauge alum. (0.125")	8 gauge alum. (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)

BTY Series Broadband BTY VHF/UHF/FM Antennas & Antenna Mounts

**BTY-2-FM
FM ANTENNA**

The BTY-2-FM is a professional quality, FM band antenna designed specifically for FM reception applications. This antenna covers the entire FM band from 88 to 108 MHz using two half-wave dipole elements mounted 90° to one another. This design give the BTY-2-FM an omnidirectional (360°) reception path.

The BTY-2-FM is supplied complete with two dipole elements, an 18" square boom, universal mounting bracket and connector cable. The heavy duty mounting bracket is designed for either vertical or horizontal tower members and will attach to masts up to 2.5" inches in diameter. 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.



4878

ORDERING INFORMATION:

**BTY-2-FM
Stock No. 4878**

FEATURES:

- Full 88-108 MHz Coverage
- 360° Beamwidth
- Fiber Filled Elements Dampen Vibration

SPECIFICATIONS

ELECTRICAL	BTY-2-FM	Units	MECHANICAL(continued)BTY-2-FM	Units
Gain Over Isotropic:	2.2	dBi	Maximum Element Width:	59.0 in
Bandwidth:	88-108	MHz	Turning Radius:	29.0 in
Beamwidth (-3 dB):	360° azimuth	°	Max. Cross Sectional Area:	0.463 sq. feet
VSWR:	1.67:1		Operational/Survival	
Return Loss:	12.0	dB	Wind Velocity:	125 mph
Impedance:	75	W	Output Connector:	Type "F", female, weather sealed

MECHANICAL

Boom:	6063-T6 alum. tube, 1.25" square, 0.062" wall		Max. Mast Diameter (O.D.):	2.5" lbs
Boom Length:	18.0	in	Shipping Weight:	3.00 kg
Number of Elements:	2			1.36
Elements:	6063-T52 alum. tube, 0.5" round, 0.049" wall		Shipping Size:	60 x 4.0 x 5.5 in
			(LxHxW)	152 x 10 x 14 cm

**BTY-C-MOUNT
ANTENNA MOUNT**

The BTY-C-MOUNT consists of a heavy duty square aluminum boom and all clamping hardware required for rear mounting of the following BTY Series 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. This maximizes the signal reception qualities of the antenna by keeping elements clear of support structures. It also eliminates the need for outriggers and masts. Antennas can be mounted horizontally or vertically on a tower leg or mast (1.25" to 2.5" O.D.) by rotating the mounting plate 90°. The BTY-C-MOUNT is designed to mount parallel to and below the antenna boom.

SPECIFICATIONS

MECHANICAL	BTY-C-MOUNT	Units
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	sq. feet
Wind Resistance (@ 100 mph):	58.2	lbs
Shipping Weight:	8.31	lbs
	3.78	kg

**BTY-MC
ANTENNA MOUNT**

The BTY-MC is a heavy duty, stainless steel antenna mounting clamp designed for stacking BTY Series Antennas. The resultant antenna array improves antenna gain for use in fringe areas. The BTY-MC has excellent weathering properties and exceptional strength. The number of clamps needed is dependent on the number of antennas stacked (i.e. 2 antenna array uses 3 clamps, a 4 antenna array uses 6 clamps). The BTY-MC is shipped completely pre-assembled and has a compact design for ease of mounting.

SPECIFICATIONS

MECHANICAL	BTY-MC	Units
Material:	stainless steel	
Mount Dimensions:	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 O.D.
Shipping Weight:	2.5	lbs
	1.14	kg



5760



4879

ORDERING INFORMATION:

**BTY-C-MOUNT
Stock No. 5760**

FEATURES:

- Antenna Cantilever Mount- Allows Antennas to Mount Directly to Tower
- Maximizes Signal Reception by Keeping Elements Clear of Support Structures
- Vertical or Horizontal Mounting

**BTY-MC
Stock No. 4879**

FEATURES:

- Stainless Steel Antenna Mounting Clamp
- Allows Stacking of BTY Series Antennas