



Low Power Educational FM Antennas

BELP antennas are specifically designed for optimum performance in low power applications. Each BELP utilizes horizontally polarized ring radiators to assure an omnidirectional pattern in the horizontal plane. The BELP-11A features a single ring element, the BELP-22A uses two rings, the BELP-33A employs three rings, and the BELP-44A features four rings. In multi-ring antennas the vertical spacing between the rings is one wavelength.

The BELP antennas are designed for mounting on a pipe or pole with an outside diameter of 2 to 2½ inches. (Two "U" bolts are provided with each antenna element.) Mounting poles and transmission line available at additional cost.

SPECIFICATIONS

Frequency Range:

Factory tuned to a specific frequency in the 88-108 MHz FM band

Polarization:

Horizontal

Pattern:

Horizontal plane pattern circularity of ± 3 dB when mounted on a steel pole

VSWR:

Typically 1.5:1, or less, ± 1.2 MHz

Input Connector:

UHF female mating to UHF male

Windloading Calculation:

Based on 50 lbs./sq. ft. for flat surfaces, 33 lbs./sq. ft. for cylindrical surfaces (velocity = 112 MPH)

Dimensions:

Single bay height approximately 9". Length approximately 23". Two bay antenna 11 ft. high; 3 bay is 22 ft.; 4 bay is 33 ft.

MODEL	STOCK NO.	POWER GAIN			FEMALE 50 OHM INPUT	POWER RATING (WATTS)	CALC. WEIGHT (LBS)	CALC. WIND LOAD (LBS)
		POWER	dB	FIELD				
BELP-11A	809-1301	0.80	-0.969	0.894	UHF	500 W	7.5	52.5
BELP-22A	809-1302	1.80	2.55	1.342	UHF	800 W	16.5	117.0
BELP-33A	809-1303	2.75	4.39	1.658	UHF	800 W	27.5	196.0
BELP-44A	809-1304	3.72	5.70	1.929	UHF	800 W	36.0	257.0