

UHF DTV/NTSC ANTENNAS

- Broadcast NTSC and DTV Channel from One Antenna
- Broadband
- Low VSWR
- Low Non-Ionized Radiation
- Horizontal Polarization
- Omni and Directional Patterns



The new "All Band" UHF-TV antenna (470-860 MHz), can be used to broadcast an existing UHF NTSC channel and any future DTV channel. The broadband and high power capabilities make it useful for multi-channel applications.

The VSWR is less than 1.1 from channels 14-69. Using the new offset techniques, low ripple ornnidirectional patterns are obtained.

Null fill and beam tilt are available by line length change. A large number of directional patterns are obtainable.

The antenna is designed in doublet pairs to minimize downward radiation and to satisfy OSHA requirements.



The antenna is hot dipped galvanized steel. All the hardware is stainless steel. A fiberglass radome covers the complete antenna. The completely grounded structure protects the antenna from lightning. As an option the entire antenna system can be covered by a cylindrical radome.



PANEL SPECIFICATIONS

nc. OWPRARY Channel: 14 - 69 VSWR: 1.1 from 470-800 MHz Impedance: 50 ohms Power: 5 kW (average) Polarization: Horizontal 1/2 Power Beamwidth: ± 32°
 Gain:
 12 dB (15.8 X) @ 650 MHz

 Size:
 3.25x1.5x0.75 ft. (1x0.45x0.23 m.)

 Weight:
 30 lbs. (13.6 kg.)

 Wind Area:
 4.8 ft. ² (0.45 m.²)

 Wind Load:
 140 lbs. (63.5 kg.)

 Connectors:
 7/8 EIA

NO. OF BAYS	PATTERN	PANELS PER BAY	GAI DB	N ⁽¹⁾⁽²⁾ POWER	WEIG LBS	GHT ⁽⁴⁾ (kg)	HEI0 FT	GHT ⁽²⁾ (m)	CaAc ft ^{2 (3)}
4 4 4 4 4	OMNI WIDE PEANUT NARROW V. NAR	4 3 2 2 1	11.2 12.5 13.9 14.3 16.9	13.2 17.8 24.5 26.9 49.0	529 397 265 265 132	240 180 120 120 60	14.5 14.5 14.5 14.5 14.5 14.5	(4.4)(4.4)(4.4)(4.4)(4.4)	70 70 67 70 40
6 6 6 6	omni Wide Peanut Narrow V. Nar	4 3 2 2 1	12.9 14.2 15.4 16.0 19.1	19.5 26.3 34.7 39.8 81.3	794 595 397 397 198	360 270 180 180 90	22.0 22.0 22.0 22.0 22.0 22.0	(6.7) (6.7) (6.7) (6.7) (6.7)	105 105 100 105 59
8 8 8 8 8	omni Wide Peanut Narrow V. Nar	4 3 2 2 1	14.1 15.4 16.5 17.2 20.3	25.7 34.7 44.7 52.5 107.15	1058 794 529 529 265	480 360 240 240 120	30.0 30.0 30.0 30.0 30.0 30.0	(9.1) (9.1) (9.1) (9.1) (9.1)	140 140 133 140 79
10 10 10 10 10	OMNI WIDE PEANUT NARROW V. NAR	4 3 2 2 1	15.1 16.4 17.5 18.2 21.2	32.5 43.8 56.2 66.4 132.5	1323 992 662 662 331	600 450 300 300 150	37.2 37.2 37.2 37.2 37.2 37.2	(11.35) (11.35) (11.35) (11.35) (11.35)	175 175 166 175 99
12 12 12 12 12 12	OMNI WIDE PEANUT NARROW V. NAR	4 3 2 2 1	15.9 17.2 18.3 19.0 22.0	38.9 52.6 67.6 79.6 158.5	1588 1147 794 794 441	720 520 360 360 200	44.8 44.8 44.8 44.8 44.8	(13.65) (13.65) (13.65) (13.65) (13.65)	210 210 199 210 118

All specifications are subject to change without notice.

(1) Referred to half wave dipole. Attenuation of connecting cables not taken into account.

⁽²⁾ Gains calculated @ 650 MHz and may vary across the UHF band.

(3) CaAc factors are calculated without panel offset. Figures are for guidance only. Contact MCI for figures specific to a particular application.

⁽⁴⁾ Allow 20 Lbs (9kg) per panel, if ordered with mounting brackets.



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