

DB540K OMNI ANTENNA

10 dBd GAIN, 406-512 MHz

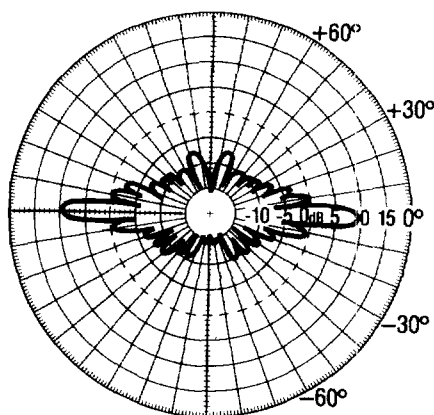


DB540K is a UHF omnidirectional antenna enclosed in a Horizon Blue™ radome made of Minimum-Tip-Deflection® (MTD®) fiberglass, Decibel's heavy duty radome material that resists extremely high winds with very little tip deflection.

- **Full UHF Coverage** - Six models fulfill spectrum needs for UHF conventional, paging and radiotelephone communications.
- **Sturdy Construction** - In addition to the Minimum-Tip-Deflection fiberglass radome, the antenna has a weather-resistant extension pipe made of strong 6061-T6 aluminum alloy.
- **Very Rugged** - The antenna resists winds to 120 mph (190 kph) with .5" (12.7 mm) of icing.
- **Engineered to Last** - All metals used in radiator, feed and matching systems are copper or brass, which minimizes galvanic reaction and reduces intermodulation.
- **Reliable** - Each antenna is tested for 500 watts power rating compliance and the absence of intermodulation generators.
- **Lightning Resistant** - A large diameter conductor extends from top to bottom to provide ground to the tower.
- **Moisture Resistant** - A removable drain plug is located at each end of the antenna.
- **Ready to Install** - DB5091-3 No-Torsion Clamp and Vapor-Wrap® are provided.

Ordering Information - Use model number for correct frequency. **Example:** DB540K-G for 450-460 MHz; DB540K-E for 406-413 MHz. Clamps are included. Order jumper cable separately, if desired.

DB540K Typical Vertical Radiation Pattern



Base Station
Antennas

Mechanical Data	
Lateral thrust at 100 mph (161 km/hr) - lbf (N)	132 (857.1)
Radome length - ft. (m)	18 (5.49)
Mast length - in. (mm)	26 (660.4)
Maximum exposed area (flat plate equivalent) - ft² (m²)	3.3 (.31)
Radome (MTD® Fiberglass) OD - in. (mm)	3.00 (76.2)
ID - in. (mm)	2.50 (63.5)
Mast OD - in. (mm)	2.50 (63.5)
Wind rating:	
Survival w/o ice - mph (km/hr)	138.8 (223.3)
Survival with .5" (12.7 mm) radial ice - mph (km/hr)	120.2 (193.3)
Tip deflection at 100 mph (161 km/hr)	12.8"
Bending moment 1" (25.4 mm) below top of mast at 100 mph (161 km/hr) - ft. lb. (N/m)	1090 (1478)
Net weight - lbs. (kg)	66 (30)
Shipping weight (w/clamps) - lbs. (kg)*	95 (43)
Clamps (galvanized steel)	DB5091-3 No-Torsion

*Mounting clamps shipped separately.

Electrical Data	
Frequency Ranges - MHz	E = 406-413, F = 412-420, G = 450-460, J = 460-470
Bandwidth - MHz	See above
Gain - dBd	10
Beamwidth "E" Plane (half power)	7°
Beamwidth "H" Plane (half power)	Omni
Maximum power input - watts	500
VSWR	1.5 to 1 or better
Lightning protection	Direct ground
Termination	Type N-Female (fixed)