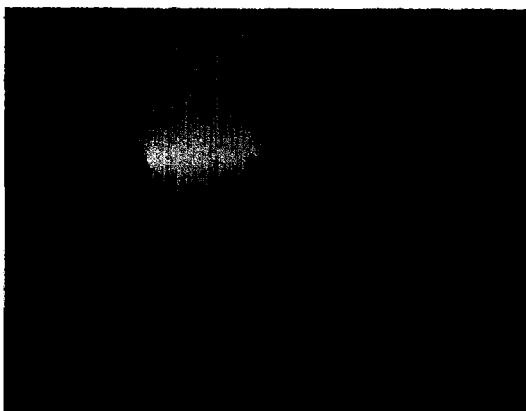
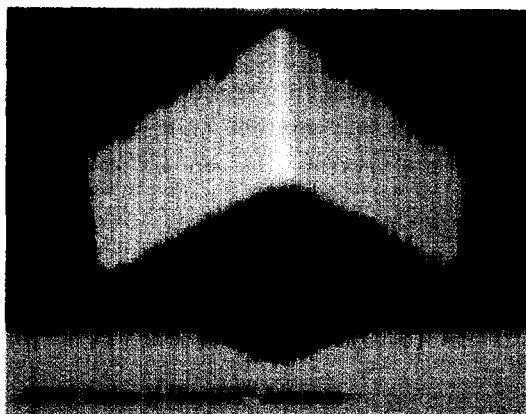


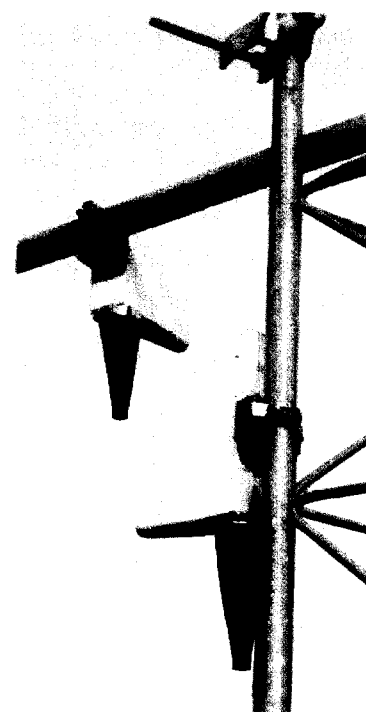


MicroFill System Antennas radiate signals inside buildings, tunnels and other structures to improve coverage so that portable cellular phones and PCN-type service can be used without co-channel interference, dropped calls, fading or poor voice quality.

- **RF Sources** - Cellular signals can be fed to the antennas from repeater-amplifiers, such as PrismPlus® and MicroLite® from ATG's Systems Division.
- **Signal Distribution** - New or existing 50 or 75 ohm CATV, LANS or TV coaxial cable can carry signals to the antennas.
- **Applications** - MicroFill antennas can serve buildings and structures with no coverage as well as those that are already covered, where coverage continues but with reduced power and interference.
- **Customized** - A variety of gain and radiation patterns permits signals to be custom fitted to the use areas, whether offices, meeting rooms or hallways.
- **Four Basic Models** - MicroFill antennas are offered for 824-894 MHz in four models, either 50 or 75 ohms impedance, 50 watts input and a VSWR of less than 1.5 to 1. (See patterns for gains.)
- **Small and Inconspicuous** - Specially designed radiation elements are enclosed inside tough plastic radomes, whose off-white color blends with walls and ceilings.
- **Additional Antenna** - DB471N-XY is



also available for interior/exterior use, with up to 5.5 dBd gain and high directivity in a single direction for large elongated areas that require coverage.



**Indoor/Outdoor
DB471N-XY
5.5 dBd Directional
Antenna**

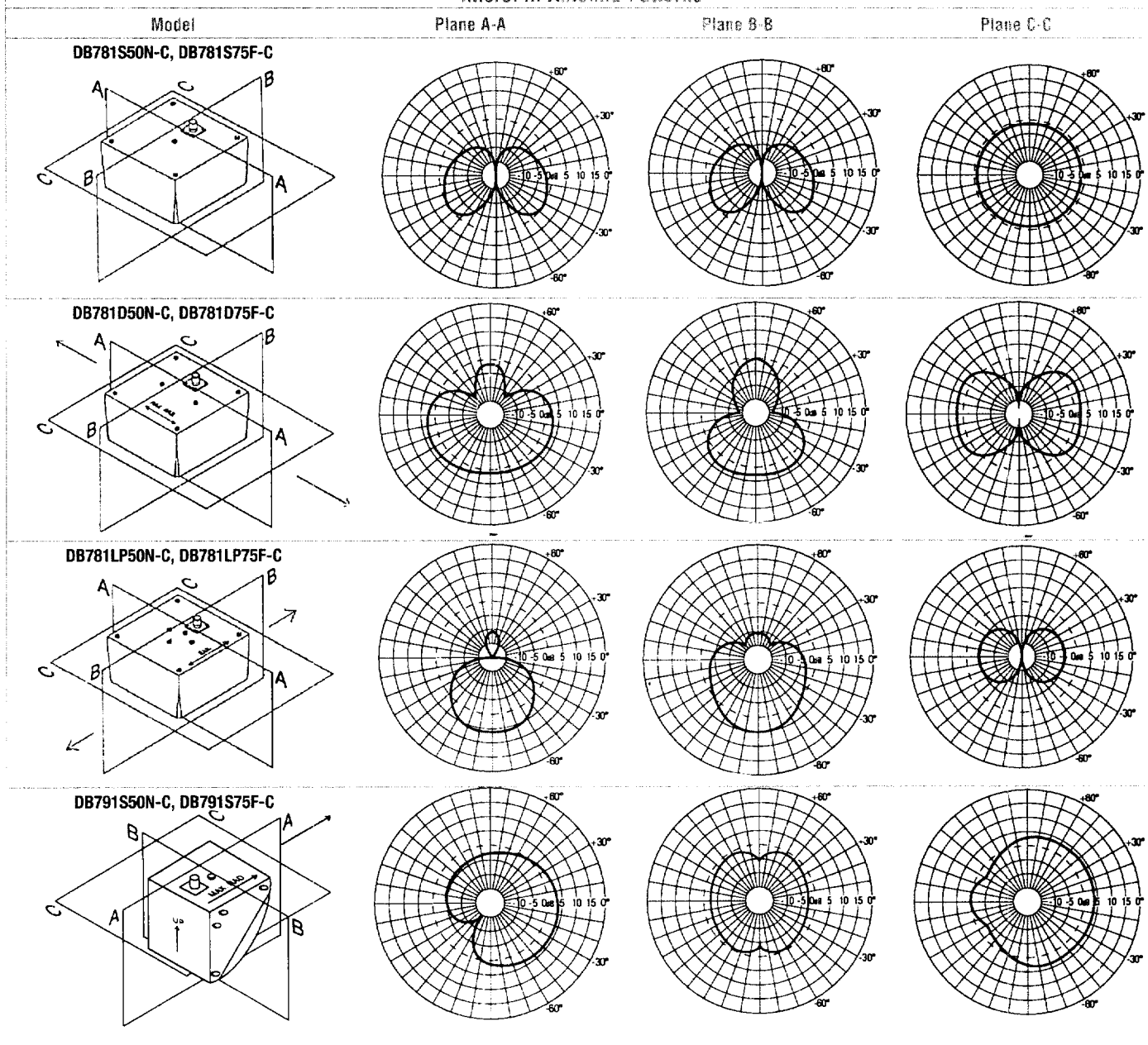
Ordering Information

See specifications and patterns and order by model number. Contact Decibel or ATG's Systems Division Engineers for assistance.

Model	DB781S50N-C	DB781S75F-C	DB781D50N-C	DB781D75F-C	DB781LP50N-C	DB781LP75F-C	DB791S50N-C	DB791S75F-C
Impedance - ohms	50	(Special*) 75	50	(Special*) 75	50	(Special*) 75	50	(Special*) 75
Termination	N-Female	F-Female	N-Female	F-Female	N-Female	F-Female	N-Female	F-Female
Frequency range - MHz	824-894		824-894		824-894		824-894	
Gain - dBd	See patterns		See patterns		See patterns		See patterns	
VSWR	<1.5:1		<1.5:1		<1.5:1		<1.5:1	
Beamwidth (3 dB from max) or pattern	"Butterfly" pattern with freespace null directly below antenna		225° A-A plane 120° B-B plane N.A. C-C plane		70° A-A plane 90° B-B plane 85° C-C plane		80° A-A plane 120° B-B plane 105° C-C plane	
Polarizations	Perpendicular to C-C plane		Perpendicular to C-C plane		Perpendicular to B-B plane		Perpendicular to C-C plane	
Input power - watts (maximum)	50		50		50		50	
Application	Indoor Tx/Rx		Indoor Tx/Rx		Indoor Tx/Rx >10 dB F/B ratio		Indoor Corner Tx/Rx >10 dB F/B ratio	
Weight - lbs. (kg)	1.7 (.77)		2.2 (.99)		1.7 (.77)		1.4 (.63)	
Material:								
Back panel	Brass		Brass		Brass		Brass	
Radiating elements	Brass		Brass		Brass		Brass	
Radome	ABS Plastic		ABS Plastic		ABS Plastic		ABS Plastic	
Color	Off-white		Off-white		Off-white		Off-white	
Mounting	Four holes in backplate		Four holes in backplate		Four holes in backplate		Four holes in backplate	
Size (WDH) - in. (mm)	8.25 x 8.25 x 4.5 (210 x 210 x 114)		8.25 x 8.25 x 4.5 (210 x 210 x 114)		8.25 x 8.25 x 4.5 (210 x 210 x 114)		6.25 x 6 x 6 (159 x 152 x 152)	
Packing size - in. (mm)	12 x 12 x 12 (305 x 305 x 305)		12 x 12 x 12 (305 x 305 x 305)		12 x 12 x 12 (305 x 305 x 305)		12 x 12 x 12 (305 x 305 x 305)	
Shipping weight - lbs. (kg)	2.7 (1.2)		3.2 (1.5)		2.7 (1.2)		2.4 (1.1)	

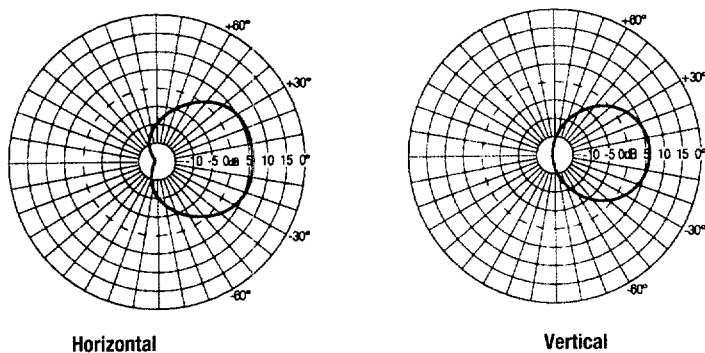
* For 75 ohm, F-Female Connector Models, contact Decibel Applications Engineering.

MicroFill Antenna Patterns



Indoor/Outdoor DB471N-XY Antenna

Typical Pattern



DB471N-XY Electrical Data

Frequency range- MHz	806-960
VSWR	<1.5:1
Nominal impedance - ohms	50
Gain (over half-wave dipole) - dB	5.5
Maximum power input - watts	125
Front-to-back ratio - dB	30
Beamwidth "E" plane (half power)	65°
Beamwidth "H" plane (half power)	110°
Lightning protection	Direct ground
Standard termination	7/16 DIN