



## SPECIFICATION SHEET

### GLIDE SLOPE ANTENNA, FULLY ENCLOSED RADOME MODEL dBs 300A with Fully Enclosed Radome Option

**dBs PART NUMBER 300300-107**



- Premium performance Glide Slope antenna
- Fully enclosed, single radome offering greater protection against the environment and birds of prey
- Delivers consistent phase stable RF signal in the world's most severe locations
- Meets FAA standards for low ceiling and limited visibility landings
- Compatible with dB Systems' signature Glide Slope removable dipole channel assembly

When used with the appropriate transmitter system, the dBs 300A fully enclosed radome antenna transmits specially formed radio frequency (RF) beams in the frequency range of 328 to 336 MHz. Aircraft equipped with the proper airborne receiving equipment can follow the glide slope signal (provided by the dBs 300A Glide Slope Antenna) and can lock on and follow appropriate descent angle safely down to the runway.

The glide slope antenna assembly consists of three collinear dipoles mounted in front of a 90-degree corner reflector, which form the shaped horizontal and vertical patterns of the antenna.

The assembly includes a temperature stabilized RF Distribution System, individual antenna element integral monitors, and a monitor combining device which provides a single monitor output. The entire RF Distribution System, as well as the integral monitor, are constructed using phase stable, semi-rigid coaxial cable which provides less sensitivity to environmental changes.

The 300A solid radome features dB Systems' high performing, reliable 300A which is mounted in the state-of-the-art solid radome. Radiating elements have 100% radome coverage to minimize environmental effects.

The RF input (J1) and the monitor output (J2) connectors are both Type N female receptacles.

Glide Slope Support Bracket (P/N 300500-100)

Optional Position Adjusting Mounting Bracket allows  $\pm 18$  inches of continuous adjustment of the antenna's physical position in the vertical and horizontal axis.

# GLIDE SLOPE ANTENNA, DIRECTIONAL, FULLY ENCLOSED RADOME

Model dBs 300A Glide Slope Antenna, Fully Enclosed Radome  
dBs PART NUMBER 300300-107

## SPECIFICATIONS/CHARACTERISTICS

**TYPE:** Uni-Directional Corner Reflector

**AZIMUTH COVERAGE:** 23° Nominal HPBW

**FREQUENCY RANGE:** 328 through 336 MHz  
(no adjustments or tuning required)

**ARRAY:** 3 collinear dipoles

**COAXIAL CABLE:** Semi-Rigid, Low Loss,  
Phase Stable

**POLARIZATION:** Horizontally polarized;  
vertical component >25 dB below horizontal  
component

**GAIN, MAIN BEAM:** >10 dB/iso

**VERTICAL COVERAGE:** 80° Nominal HPBW.  
Front to Back ratio > 16 dB.

**MAIN BEAM LOCATION:** Within  $\pm 2^\circ$  of  
mechanical axis. Electrical center is normal to  
and centered within the reflector face.

**POWER HANDLING CAPABILITY:** <50 watts  
CW

**IMPEDANCE:** 50  $\Omega$  nominal

**VSWR:** <1.25:1 from 328 MHz to 336 MHz

**SIZE:** 30" H x 87.5" L x 15" W

**WEIGHT:** 97 lbs.

**SHIPPING WEIGHT:** Crate is 93" L x 24" W x  
44" H and weighs 305 lbs. Crate is stackable.

**RF MONITOR:** Monitor coupling factor is 10 dB  
 $\pm 1$  dB below input signal level. Monitor is stable  
to within  $\pm 0.5$  dB and  $\pm 5^\circ$  (electrical phase) over  
environmental conditions.

**ANTENNA HEATER:** N/A

**INTERFACE CONNECTORS:**

Main RF Input: Type N Female

RF Monitor Output: Type N Female

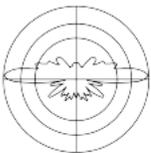
Antenna Heater AC Input: MS-3102-22-9P

**ENVIRONMENTAL:** FAA-G-2100F,  
Environmental III (4 in./hr. rain, sleet, and snow)

**MOUNTING:** 4 each 7/16 dia. through holes for  
3/8 dia bolts. Interface bolt pattern horizontal  
separation is 21.5"; vertical separation is 19.75".

**SUPPORT BRACKET, GLIDE SLOPE:**

Optional Position Adjusting Mounting Bracket  
(P/N 300500-100) allows  $\pm 18$ " continuous  
adjustment of antenna physical position in  
vertical and horizontal axis.



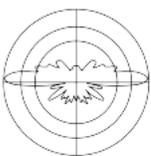
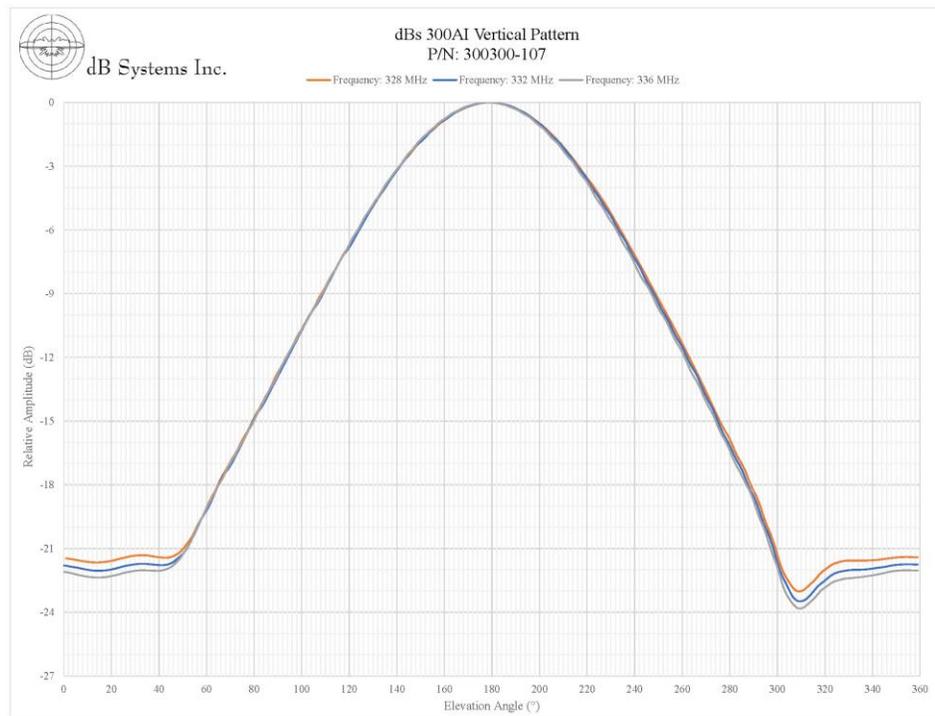
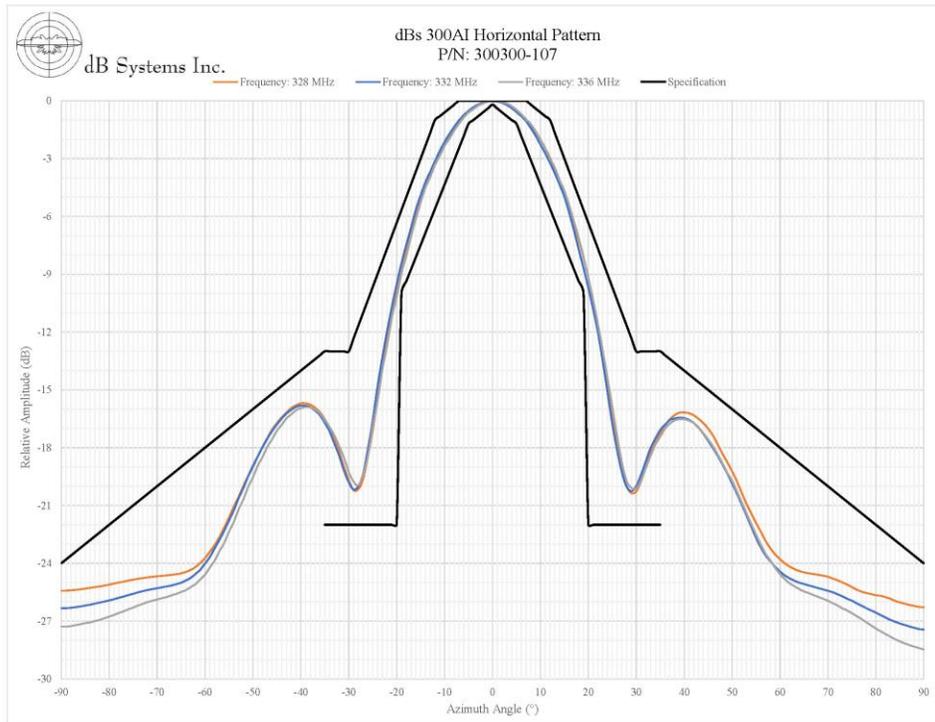
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# dBs 300A Solide Radome Horizontal & Vertical Patterns



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