dB Systems Inc.

2501 S. Antenna Avenue
Hurricane, Utah 84737 USA

SPECIFICATION SHEET

GLIDE SLOPE ANTENNA, DIRECTIONAL
MODEL dBs 300A High Gain

dBs PART NUMBER 300300-102

The dBs 300A High Gain is a premium performance Glide Slope (Glide Path) Antenna offering a main beam gain of >12 dB/iso.

Engineered and built on the legacy of all dBs products, this antenna delivers consistent, phase stable RF signal in the world's most severe locations, such as Cold Bay, Alaska.

Each antenna is phase matched and tested to meet the current FAA standards for low ceiling and limited visibility landings.

The 300A High Gain has a removable dipole channel assembly. This feature minimizes the need for adjustment following antenna replacement, as the corner reflector assembly can remain in place on the tower while the channel assembly is removed and replaced.

The Glide Slope High Gain antenna assembly consists of three collinear dipoles mounted in front of a 94-degree corner reflector, which form the shaped horizontal and vertical patterns of the antenna and provides a high gain main beam.

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 RF input (J1) and the monitor output (J2) connectors are both Type N female receptacles. Glide Slope Support Bracket (P/N 300500-100) is an optional position adjusting mounting bracket which allows ~18 inches of continuous adjustment of the antenna's physical position in the vertical and horizontal axis.

GLIDE SLOPE ANTENNA, DIRECTIONAL

Model dBs 300A High Gain
dBs PART NUMBER 300300-102

SPECIFICATIONS/CHARACTERISTICS

TYPE: Uni-Directional Corner Reflector

AZIMUTH COVERAGE: 23° Nominal HPBW

FREQUENCY RANGE: 328 - 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: >12 dB/iso

VERTICAL COVERAGE: 70° Nominal HPBW. Front to Back ratio >17 dB.

MAIN BEAM LOCATION: Within ±2° of mechanical axis. Electrical center is normal to and centered within the reflector face.

POWER HANDLING CAPABILITY: <50 Watts CW

IMPEDANCE: 50 Ω nominal

VSWR: <1.20:1 from 328 - 336 MHz

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

WEIGHT: 38 Lbs.

SHIPPING WEIGHT: Crate is 93" L x 38" W x 29" H and weighs 275 lbs. Crate is stackable.

RF MONITOR: Monitor coupling factor is 10 db ± 1 dB below input signal level. Monitor is stable to within ±0.5 dB and ±5° (electrical phase) over environmental conditions.

ANTENNA HEATER: Main Power 240 VAC, 240 Watts. Heaters always wired to ON. External thermostat control required.

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 ea. 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 ±18" continuous adjustment of antenna physical position in vertical and horizontal axis.

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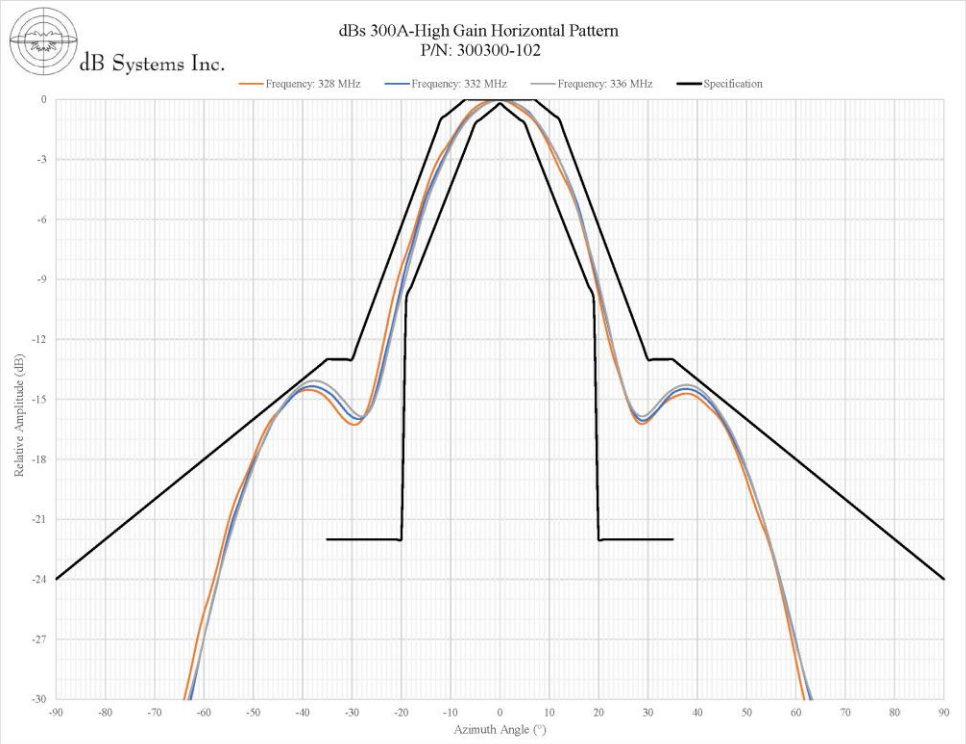
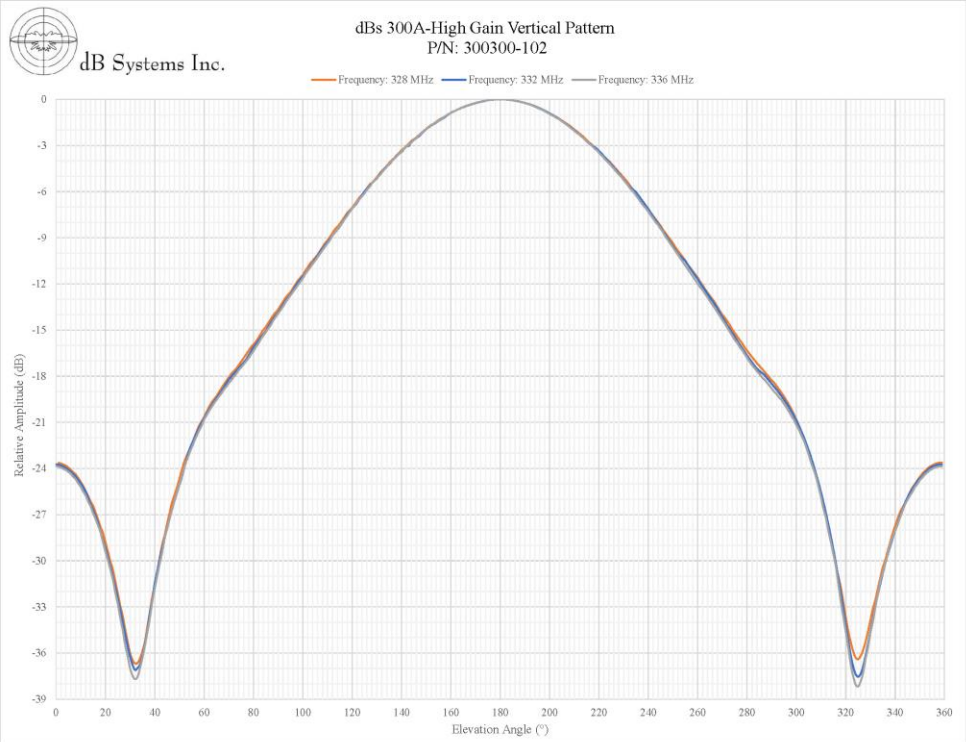
dBs 300A High Gain Horizontal & Vertical Patterns





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