Antenna Equipment Characteristics

The following presents a summary of each of the antenna that will be used in the experiments.

Silvus Technologies SC 42A0-235
Silvus Technologies SC 44K0-235

Antenna	Gain (Main Beam	Polarization	Orientation in Vertical Plane	Orientation in Horizontal Plane	Type
Commscope DB992HG28N-B	16 dbi	Vertical	30º	28º	Smal Cell (single dipole with box reflector

- 1st Major Side Lobe
  -15 dB @ 45-65 degrees

  Ground antenna array consists of 2x DB992HG28N-B small cell antenna and 2x omni-directional antennas mounted on a common 2m tripod mast. The DB992HG28N antennas are mounted over and under the tripod mast and are aligned with zero tilt at the same azimuth. The two omni antennas are mounted on top of the upper antenna with zero tilt. Each antenna is fed by one port of a 4-port MIMO transceiver P/N SC44KOE-235-SBST. The MIMO transceiver automatically selects which antenna to use.

Antenna	Gain Main Beam	Polarization	Orientation in Vertical Plane	Orientation in Horizontal Plane	Type
Silvus AOV2D235515S-TM	2.0 dbi	Vertical	59º-81º	360	Half-wave dipole omni-directional

1st Major Side Lobe
None
Silvus AOV2D235515S-TM is similar to Southwest Antenna P/N 1001-104.
Aircraft antenna array consists of 2x 88296 omni-directional antennas mounted in stacked configuration; one each embedded in upper and lower vertical stabilizers. Each antenna is fed by one port of a 2 port MIMO transceiver. The MIMO transceiver automatically selects which antenna(s) to use.