

GA-ASI is working towards a prototype flight of a new AESA Eagle Eye antenna, which will have a higher transmit power in the previous frequency bands for Lynx and Eagle Eye.

Pulse characteristics

- Pulse Repetition Rate (PRR) and Pulse Duration (PD) vary by mode.
- The Pulse Repetition Interval (PRI) minimum is 66.67 us and maximum is 10,000 us. The duty cycle is 35%. PD is 23.33 us minimum to 3,500 us maximum.
- The PRF is variable with minimum of 100 Hz and maximum of 15 kHz, i.e., 100 up to 15,000 pulses per second.
- Pulse chirp frequency is 1462.5 MHz to 1837.5 MHz.

Antenna pattern

AESA aperture gain is 35.2 dBi. HPBW is 2.0° in Az, and 4.4° in El.

Antenna characteristics: orientation, elevation tilt angle range, azimuth/elevation scan rate

The antenna will be fixed in elevation tilt at 25° below center axis of aircraft. It is mechanically steerable 360° in azimuth and electronically steerable ±35° in elevation and ±15° in azimuth.

Emission roll-off

1G56Q3N	
-3dB	1.538GHz
-20dB	1.561GHz
-40dB	3.232GHz
-60dB	4.425GHz
OC-BW	1.561GHz
1G88Q3N	
-3dB	1.770GHz
-20dB	1.880GHz
-40dB	4.000GHz
-60dB	4.420GHz
OC-BW	1.880GHz
295MQ3N	
-3dB	144.5MHz
-20dB	147.5MHz
-40dB	835MHz
-60dB	1.985GHz
OC-BW	147.5MHz
636MQ3N	
-3dB	305MHz

-20dB	318MHz
-40dB	1.14GHz
-60dB	2.2GHz
OC-BW	318MHz