

## Features

- Integrated guard channel for sidelobe blanking
- Wide field-of-regard with exceptional roll-off
- Fully configurable transmit and receive tapers
- Integrated loopback paths for cable calibration
- Integrated RF built-in test (BIT) network for in situ element verification
- Ruggedized electrical and mechanical interfaces

## Applications

- Communication
- Collision avoidance
- Weather detection
- Synthetic Aperture Radar (SAR)
- Ground Moving Target Indicator (GMTI)
- Electronic Warfare

## Performance Summary

Size	11" × 11.5" × 6"
Weight	<25 lb
Power	<950 W
Frequency	8.0 - 11.0 GHz
Directivity	27.4 - 30.2 dBi
Scan Volume	±60° Conical
Polarization	Vertical
Radiated Power	512 W
Noise Figure	< 6 dB
Cooling	Forced Air



Figure 1. FRF-278 Multi-Mode AESA

## General Description

Designed to support multi-function operations at X-band including radar, communications, and electronic warfare, the FRF-278 utilizes the latest in GaN and SiGe semiconductor technology. This AESA has been ruggedized to meet common DO-160 and MIL-STD requirements for airborne AESAs and can be easily tailored to similar environments. While optimized for pulse-doppler operations, the FRF-278 can be used for high duty-cycle and continuous-wave applications with the appropriate settings.

Constructed from a modular architecture, the FRF-278 can be readily tailored to different form factor, platform, or environment constraints to meet a wide range of mission needs.

Additional information is available upon request. Please contact [inquiries@firstrf.com](mailto:inquiries@firstrf.com) for more details.