

Company Profile

Engineering Services

Antenna Design & Prototyping JEM Engineering has years of experience designing antennas for both military and commercial applications from HF to millimeter wave. Using state-of-the-art automated design and optimization techniques, along with experience, JEM can design and develop antennas to meet your specific requirements. Areas of expertise include:

Active Antennas Aperture Antennas Broadband Antennas Electrically-Small Antennas

Genetic Antennas Low-Observable Antennas Microstrip Patch Antennas & Arrays Wire Antennas

Manufacturing

Antenna Manufacturing JEM manufactures its own antenna designs and offers build-to-print manufacturing capabilities-all to ISO 9001 standards of quality (Mil spec and FAA quality systems also available). JEM's manufacturing expertise utilizes a combination of both in-house and outsourced fabrication methods and assembly.

Antenna Testing

Located at JEM's Laurel-MD headquarters are two antenna performance testing facilities. Capabilities include: antenna voltage standing wave ratio (VSWR), gain, radiation pattern and coupling/isolation testing. Offering production testing services, chamber rental (with operator) by the hour, halfdav or full dav.

Tapered Chamber This 14' x 14' x 45' tapered anechoic chamber provides far-field testing from 100 MHz to 40 GHz.

Satimo Chamber This Satimo STARGATE-64 spherical near-field range is the fastest antenna measurement facility available today for full-sphere data collection. This system has the capability to measure radiation patterns, gain and antenna efficiency in either free-space conditions or with surrogate or live human test subjects. Both passive and active antenna measurements can be performed for a wide variety of devices operating between 400 MHz and 6 GHz. Data output options include full 3D and conventional 2D radiation patterns. ASCII data files are easily processed using such tools as MATLAB[®], MathCAD[®] or EXCEL[®]. By utilizing this state-of-the-art testing facility companies can cut costs and save time by completing measurements in minutes—measurements that would take hours with a conventional range.

EIN: available upon request SIC: 3663 NAIC: 334220, 541330 MBE Cert: MBE03-233 Woman Owned

CAGE Code: 3B6J2 DUNNS No.: available upon request PRO-NET: PO269524 JCP: 0037432 CCR Registered Principal Contact: James Lilly, Chief Engineer

LDBE: LD2002-0338 8(a) / SDB Certified: 109112 QA: ISO 9001 Compatible

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