

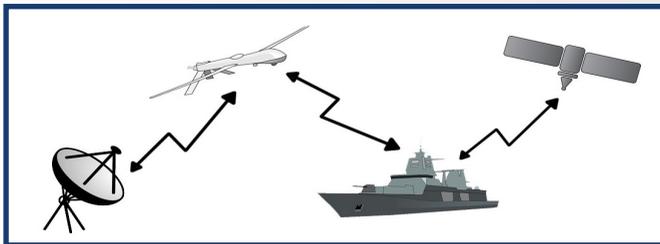
RF and Microwave Design and Development Services

NuWaves is the preferred partner of concept-to-production RF and Microwave Systems and Subsystems. By providing advanced RF/MW expertise in military and defense electronics, we will advance your mission and commit to your project success.

Concept to Production

Step 1

Concept



NuWaves provides quick turn design solutions and specification development to address problem statements and opportunities through system level design expertise. NuWaves uses state-of-the-art design techniques to provide cost effective solutions to the end user. We offer a full spectrum of RF solutions with a full understanding of the technical challenges.

Step 3

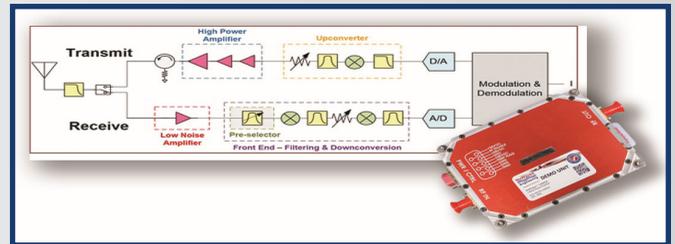
Qualification



In-house Military Standard, DO-160 Standard, and system level testing for application specific and platform certification. NuWaves frequently designs and tests to MIL-STD documents and we quickly and cost effectively meet stringent system level qualification requirements. NuWaves has an in-house anechoic chamber, vibration/shock table, and temperature and humidity chambers to test a wide range of EMI/EMC and environmental conditions for military applications.

Step 2

Design



We offer a full suite of system and sub-system design, synthesis, and analysis services to advance your RF and Microwave capabilities. NuWaves provides custom designs for power amplifiers, transmitters, receivers and front-ends, high power frequency converters and signal sources, and systems/sub-systems. Quick turn designs are achieved by leveraging our broad range of past experience in designing for military and defense applications.

Step 4

Production



High quantity production with in-house manufacturing, production, and test team. NuWaves is certified to AS 9100:2016 Rev D and ISO 9001:2015 standards. We provide contract manufacturing for defense, military, and commercial customers. NuWaves is a cost effective, yet high value one-stop-shop offering services from concept to production.

Core Competencies and Key Capabilities

Power Amplifiers

- Power Amplifier Design
- Bi-directional Amplifiers
- Transmit/Receive Modules
- Radio Heads
- Designs up to 32 GHz
- Broadband Techniques
- High-Power Signal Sources
- Specification Development

Transmitters

- Wireless Range Extension
- Radio Heads
- High-Power Signal Sources
- Broadband Techniques
- Specification Development

Receiver and Front-Ends

- Low Power Receivers
- Low Noise Front-End Amplifiers
- RF Tuners
- Modulator and Demodulator Design
- Specification Development

High Power Signal Sources and Frequency Converters

- Up-converters/Down-converters
- Transverters
- Frequency Conversion
- RF Frequency Multipliers
- High-Power Signal Sources
- Frequency Sources
- Specification Development

Systems and Sub-Systems

- RF Propagation Analysis
- Antenna Modeling, Analysis, and Design
- System Modernization
- System Sustainment
- Vibration Testing
- EMI Confidence Testing
- Mechanical Design
- Printed Circuit Board (PCB) Layout
- Circuit Card Test and Manufacturing
- GNU Radio Development
- Engineering Consulting Services
- Test Bed Developments
- Gap Analytics and Studies
- Independent Third Party Evaluation
- Product Reconfiguration
- Obsolete Product Repair
- Research and Development
- Component Replacement Program
- DoD & Aerospace Electronics
- Miniaturization
- Custom RF and Analog Filters
- RF Phase Control
- RF Systems Integration
- Custom Synthesizers
- Local Oscillator Distribution
- Low Phase Noise Designs
- Communications Engineering
- Product Development