

2022 NEWSLETTER ISSUE I

LEARN ABOUT OUR IMPACTFUL 2021 AND WHAT'S IN STORE FOR 2022

Triad RF Closed 2021 Strong2	Featured Products
Company Highlights: Manufacturing Capacity Expansion	TRIAD High Power Radio Systems
Customer Spotlights: 5G supplier	Airborne ISR, UXV, and Military Wireless Networks5
Case Study3	CubeSat5
Industry Experience: Key Considerations for a Successful Custom RF Amplifier Design3	Electronic Warfare/Counter UAS
Trade Show Appearances4	Coming in 20226

Increased manufacturing facilities sixfold

New sales orders yielded record revenue

Sold to customers in 39 countries and 6 continents

Accumulated over 16 years of operating time in low Earth orbit to date

TRIAD RF CLOSED 2021 STRONG

While navigating through the pressures of a global pandemic, Triad RF Systems continued its growth streak in all aspects of its business, despite an international chip shortage in 2021. Triad increased its manufacturing capacity sixfold, added key skilled employees to our team, and achieved a new record for revenue.

Over the last decade, Triad has delivered the highest quality, state-of-the-art high performance amplifiers, subsystems and circuits. Our company thrives as problem solvers, armed with the industry experience needed to meet the ever-demanding challenges when it comes to size, features, efficiency, and linearity. Triad engineering pushes the limits of product performance while minimizing risk.

Triad's proven product innovation has contributed to its global growth in both the private and public sector. Through our established products and drive to continue innovating, we provide reliable solutions for a wide array of markets, such as unmanned systems, drones, CubeSat platforms, custom military applications, and electronic warfare systems. With a successful track record in numerous low Earth orbit missions, Triad is solidifying its position as one of the industry's leading COTs manufacturers of CubeSat amplifiers.



TOP STORIES



COMPANY HIGHLIGHTS: MANUFACTURING CAPACITY EXPANSION

Triad RF Systems opened its new Manufacturing Center, conveniently located opposite the company's existing Design Center in East Brunswick, New Jersey. This new facility increases Triad's manufacturing capacity sixfold and creates additional space to expand the company's innovative design center.

Learn more on the expansion and its dedication to quality production.



CUSTOMER SPOTLIGHTS: 5G SUPPLIER CASE STUDY

In a continuing effort to solidify our position in CubeSat RF amplifiers, Triad RF Systems partnered with a 5G supplier to create a bi-directional RF amplifier that launched on the SpaceX Falcon 9 Transport-2 on June 30, 2021. This was just the beginning, as Triad is still working with the customer.

Learn more about the story of how this development came together.

READ OUR CASE STUDY



INDUSTRY EXPERIENCE: KEY CONSIDERATIONS FOR A SUCCESSFUL CUSTOM RF AMPLIFIER DESIGN

Custom RF amplifiers can be constructed to fit any number of criteria, being the perfect solution to your long-range applications. But, before the design process begins, there are a plethora of questions that need to be answered.

In our tech brief, we take you through the different steps of the process and everything you need to know to get the perfect custom RF amplifier.

READ OUR TECH BRIEF

READ OUR UPDATE



COME SEE US



Triad RF Systems will be returning to XPONENTIAL in Orlando, FL from April 25th to April 28th. Come visit us at Booth #2261!



FEATURED PRODUCTS FOR YOUR MARKETS AND APPLICATIONS

Triad RF's strength in custom RF amplifier innovation allows us to cater to a wide variety of industry needs. Here are just some of the solutions from our long list of products that can help achieve your long-range application goals:

TRIAD HIGH POWER RADIO SYSTEMS (THPR)

TRIAD High Power Radio Systems are a wireless network architect's best choice when time, cost, and optimal performance and range are critical. These fully-integrated and optimized radios are an evolution of many years of experience enabling some of the highest data-rate, longest range ISR wireless links in the Unmanned Land, Sea, and Air Systems industry.



High Power Radio
THPR1012



High Power Radio



High Power Radio
THPR1070



AIRBORNE ISR, UXV, AND MILITARY WIRELESS NETWORKS

Triad's legacy and expertise in amplifying long-range, high data rate radio links has yielded many small and lightweight COTS BDAs that are reliable, simple to integrate, and rugged enough to pass any MIL-STD-810G test thrown at them. Our BDAs are the first choice for many radio system designs in applications, where more RF power is required to create ultra-long-range unmanned data links and other radio communications, and/or in applications that require the highest data throughput.

C-BAND



Dual Bi-Directional SSPA

TTRM4005DR



Dual Bi-Directional SSPA

TTRM4305DR

S-BAND



Dual Bi-Directional SSPA

TTRM2005DR

L-BAND



Dual Bi-Directional SSPA

TTRM1132DR

CUBESAT

Closing a Low Earth Orbit link across hundreds of miles is challenging and only multiplies as CubeSats become tasked to provide increasing amounts of bandwidth and data rates across limited-spectrum links. The short mission lengths of CubeSats allow for their radio systems to be continually upgraded and deployed at a much faster rate than traditional large satellite deployments. RF subsystem technology must keep pace, and Triad remains adept at designing for the rigors of the CubeSat environment. In addition to designing for lighter weight and more aggressive requirements, we perform the requisite analysis to ensure each RF amplifier and radio system we deploy passes all pre-flight requirements.

S-BAND



Dual Bi-Directional SSPA

TTRM2021



Power Amplifier

TA1134

L-BAND



CubeSat Transceiver

TTRM1212

ELECTRONIC WARFARE/ COUNTER UAS

Triad's line of Wideband Amplifier modules for extended range amplified radio applications set the bar for efficiency, linearity, and size-to-power ratio. We have designed hundreds of COTS modules for exacting frequencies up to 40 GHz. They offer high power levels into the hundreds of watts for your EW and CUAS needs. If a standard RF/microwave amplifier design does not fit your exact requirements, we're specialists in creating custom-modified versions of any of our COTS power amplifier modules.



Wideband Amplifier

TA1216



Wideband Amplifier

TA1217





TriadRF.com

Suite I 11 Harts Lane East Brunswick, NJ, 08816

2022 PREVIEW:

Amplifier Tech Briefs

New Product Innovation
Announcements

Customer Case Studies

Future Trade Show Appearances