



## INNOVATION IN THE RF/MICROWAVE TECHNOLOGY

# High Quality Amplifiers for the Next Generation

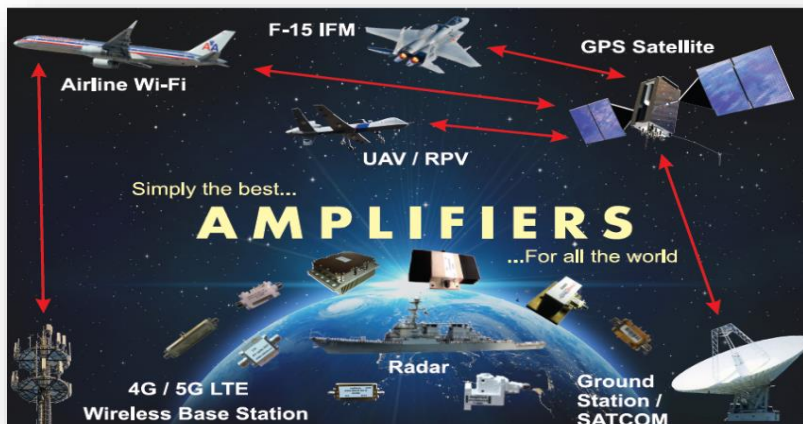


- **Competitive Price**
- **High Performance**
- **Space Qualified**

**MADE IN USA**



# Who We Are.....



**AmpliTech**, Inc. has established a reputation for the highest quality amplifiers with the most difficult specifications in the world. It has cornered the market on custom designed amplifiers with special requirements such as military screening, space-grading and EMI shielding. To provide for customers dealing with extremely low noise figure applications, we have excelled in the cryogenic market as well. Customers agree, that we provide simply the best product and services available in the industry while maintaining lower prices than most of the competitors. We stand by our product with an iron-clad warranty as well as with technical support in helping our customers get the most from our products.

# New Acquisition

AmpliTech is proud to announce the addition of  
**Specialty Microwave**  
to its Group with leading-edge  
SATCOM complementary products.

AmpliTech has expanded yet again by acquiring Specialty Microwave, another leader in the industry focusing on switches, control systems and SATCOM hardware. We are in progress of developing new line of passive products including filters, detectors, limiters, and more

## Specialists of Microwave Technology



AmpliTech, a developer of custom and standard state-of-the-art RF components for the Commercial, SATCOM, Space, and Military markets has signed an asset purchase agreement to acquire the business assets of Specialty Microwave. (SMW), a privately held company based in Ronkonkoma NY.

# AmpliTech Amplifiers

- Power Amplifiers
- SATCOM Amplifiers
- Cryogenic Amplifiers
- Ultra Wide Band LNAs
- Waveguide Amplifiers
- Narrow Band Amplifiers
- Surface Mount Amplifiers
- Low Frequency Amplifiers
- Low Phase Noise Amplifiers
- Millimeter Wave Amplifiers



X/Ku Band  
SATCOM 35-50K NT



Ka Band SATCOM  
100K NT



100 W Power  
Amplifier

- **Waveguide Assemblies**
- **Waveguide to Coax Adapters**
- **High Power Dummy Loads**
- **Crossguide Couplers**
- **Broadwall Couplers**
- **Integrated Systems**
- **Block Downconverters**
- **1:2 Tx Protection Switch Panels**
- **Redundant LNA Controllers/Plates**
- **Subsystems**
- **Specialized Electronic Assemblies**
- **Table Top Amplifiers**



# The Best Amplifiers In The World.....And More

*Standard state-of-the-art RF/Microwave components for the commercial, SATCOM, space, & military markets.*

- Highly customized RF/Microwave amplifiers that cover frequency ranges from 50 kHz to 40 GHz.
- Cryogenically cooled LNAs that achieve the lowest Noise Figures in the industry.
- High reliability Space-Qualified components that meet standards of excellence that no other manufacturer in the industry can match.
- Consulting services to provide technical support for any microwave components or systems design issues, even from other manufacturers.



**Satellite Reception & Transmission**



**Antennas, Cellular Base Stations & Wireless**



# Featured Products...

## Power Amplifiers

Part Number	Range (GHz)	Gain (dB)	Gain Flatness	Noise Figure	VSWR	P@1dB (dBm)	VDC	Outline
APTHP1-00200060-1835-D9	0.02-6.0	16	$\pm 1.8$ dB	3.0 dB	2.0:1	+35	+29	D9
AMTHPA-00700270-100W	0.7-2.7	53	$\pm 1.0$ dB	3.4 dB	1.8:1	+50	+32	D50
AMTPA-02001800-4W	2.0-18.0	35	$\pm 2.5$ dB	5.5 dB	2.0:1	+36	+24	D36
APTMP3-00501800-3022-D4	0.5-18.0	32	$\pm 2.0$ dB	3.0 dB	2.5:1	+22	+15	D4

### AMTHPA-00700270-100W

#### Product Features

- Broadband High-Power Amplifier
- 700-2700MHz Operation Bandwidth
- Power Gain 53dB@ Pin -3dBm
- Gain Flatness $\pm 1.0$  dB Typ.
- 100 W Typical @Pin -3dBm
- Unconditionally Stable
- 50 Ohm Input & Output Matched
- PAE 30%
- Built-in Heatsink & Fan Cooling

### AMTPA-02001800-4W

#### Product Features

- Medium power 4W SSPA
- Wideband, 2 to 18 GHz
- High IP3,
- +44 dBm typ.
- High dynamic Input -3dBm
- High gain, 35dB typ.
- Good directivity
- Internal voltage regulated for 24 to 28VDC



## Medical Diagnostics and Treatment

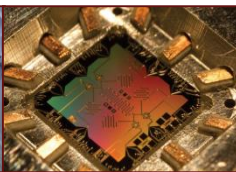
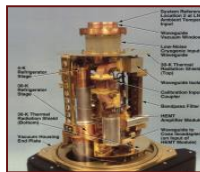
# Featured Products...

## Wide-Band LNA's

Part Number	Range (GHz)	Gain (dB)	Gain Flatness	Noise Figure	VSWR	P@1dB (dBm)	VDC	Outline
APT4-18004000-4008-D20	18.0-40.0	41	±3.0 dB	4.0 dB	2.3:1	+8	+11	D20
APT4-26004000-2310-D20	26.0-40.0	40	±2.5 dB	2.3 dB	2.0:1	+10	+15	D20
APT4-00502650-3010-D22	0.5-26.5	30	±2.0 dB	2.8 dB	2.5:1	+10	+15	D22
APT3-01001800-1910-D4	1.0-18.0	20	±2.0 dB	1.9 dB	2.5:1	+15	+15	D4
APT3-00101800-2510-D4	0.1-18.0	23	±2.0 dB	2.5 dB	2.0:1	+10	+15	D4

## Cryogenic Amplifiers

Part Number	Range (GHz)	Gain (dB)	Gain Flatness	Noise Figure	VSWR	P@1dB (dBm)	VDC	Outline
APTC5-06002000-6K00-D4	6.0-20.0	34	± 1.5 dB	6K@8K	1.5:1	0	+0.8	D6/CR6
APTC5-16002800-6K00-42-D4	16.0-28.0	40	± 2.0 dB	6K@6K	1.5:1	0	+1.8	D6/CR6
APTC5-04000800-2K00-D4	4.0-8.0	39	± 0.5 dB	2K@6K	1.5:1	-6	+0.5	D4/CR4
APTC3-00501800-75K00-D4	0.5-18	38	± 2.5 dB	4K@6K	2.5:1	-6	+0.8	D4
APTC5-00301400-4K00-D4	0.3-14.0	40	± 2.0 dB	4K@6K	1.5:1	-10	+0.8	D6/CR4
APTC5-01001200-5K00-D4	1.0-12.0	39	± 2.0 dB	5K@12K	1.5:1	+1	+1.0	D6/CR4
APTC5-02000400-1K00-D4	2.0-4.0	38	± 2.5 dB	1K@6K	2.5:1	-10	+1.0	D6/CR4



**Cold LNA Space  
Exploration**

**Quantum Computing**

**High Sensitivity Test  
Equipment**



# Featured Products...

## SATCOM Amplifiers

Part Number	Range (GHz)	Gain (dB)	Gain Flatness	Noise Temp (K)	VSWR	P@1dB (dBm)	VDC	Outline
APTW5-07250775-44K20-112	7.25-7.75	54	±0.50 dB	40	1.25:1	+22	+16	WR112+D6
APTW6-10701275-75K10-WR75-D6	10.7-12.75	65	±0.75 dB	70	1.3:1	+15	+16	WR75+D6
APTW5-17702020-120K20-42-S	17.7-20.2	52	±1.50 dB	115	1.2:1	+12	+18	WR42+D4
APTW5-17801830-105K10-42-S	17.8-18.3	50	±0.75 dB	105	1.5:1	+10	+15	WR42+D6

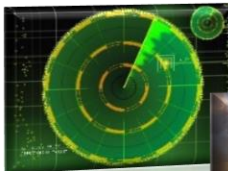
## Low Phase Noise Amplifiers

Part Number	Range (GHz)	Gain (dB)	Gain Flatness	Phase Noise @ 10 KHz Offset (dBc)	VSWR	P@1dB (dBm)	VDC	Outline
APT5-06001800-5017-D6-LPN	6.0-18	50	±1.0 dB	-140 dB	2.0:1	17	+15	D6
APT3-02000400-0613-D4-LPN	2.0-4.0	30	±2.0 dB	-145 dB	2.0:1	13	+15	D4



## SATELLITE COMMUNICATIONS

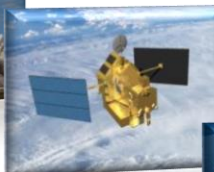
# Product Applications.....



**Radar**



**Space**



**Satellite**



**Passenger Aircraft**



**Drones**



**Wi-Fi Systems**



**Dish Antennas**



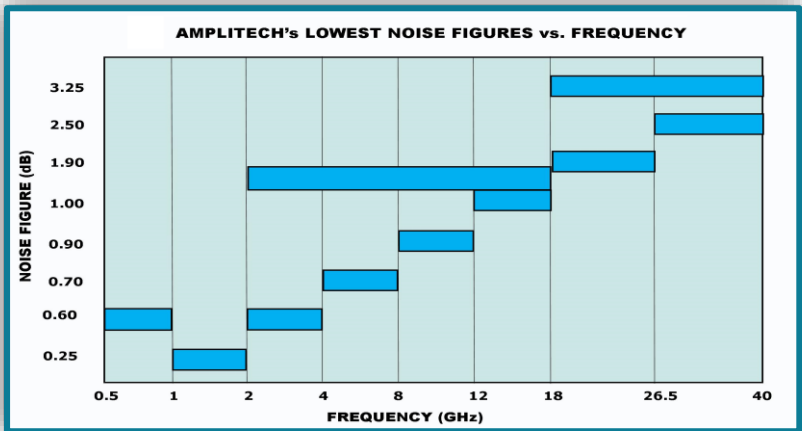
**Cell Phones**

**Military Aircraft**



# What we do.....

AmpliTech, Inc. designs, develops, and manufactures custom and standard state-of-the-art RF components for the Commercial, SATCOM, Space, and Military markets. These designs cover the frequency range from 50 kHz to 110 GHz. AmpliTech also provides consulting services to help with any microwave components or systems design problems. Our growth has come about because we can provide complex, custom solutions.



The chart above demonstrates the superiority of AmpliTech's Low Noise Amplifiers by detailing the typical Noise Figures our LNAs can achieve over the most common Frequency bands in use today, up to 40 GHz.

# What we do.....

- Base station amplifier system (FireAmp Series) for front end of all communications systems targeting wireless base stations for network carriers and airline Wi-Fi providers
- MMICs (Integrated Circuits) for virtually ALL communication and systems applications including encryption for low cost cyber-security applications for military and commercial markets
- Time frame only 8 months post-funding. Go-to-market, and revenue growth can start this year
- Funding efforts are critical to pending backlog where customers are showing sensitivity to current capital & liquidity



# Our Customers.....



**BAE SYSTEMS**



**GOVERNMENT OF ISRAEL | MINISTRY OF DEFENSE**

# AmpliTech's Facility



Address: 620 Johnson Avenue Bohemia, New York 11716



Address: 120 Raynor Avenue Ronkonkoma, New York 11779