

Commercial Space Products Catalog

TRL-9 Certified | Space Qualified | Flight-Proven | Operational Reliability

Power Amplifier Model	Frequency Range	RF Output Power	Drive Level	Gain	Supply Voltage	Current Consumption (@ 28 Vdc)	Size (L x W x H)	Weight	Space Environment Heritage	
NW-PA-ULS-25-C01-S01	200 - 2600 MHz	25 W	0 dBm	44 dB	+11 to +32 VDC	2.0 A	2.34"x 1.96" x 0.62"	2.0 oz	LEO	
NW-PA-15D05A-C03-S01-D37	1500 - 1700 MHz	50 W	+37 dBm	14.5 dB	+27 to +30 VDC	3.00 A	4.50"x 3.50" x 0.61"	9.0 oz.	Slated for Launch	
NW-PA-LS-20-C01-S01	1000 - 2500 MHz	22W	0 dBm	43 dB	+11 to +32 VDC	2.10 A	3.00"x 2.00" x 0.65"	3.0 oz.	Lunar	
NW-PA-LS-20-C02-S01-D30	1000 - 2500 MHz	20W	+30 dBm	43 dB	+11 to +32 VDC	2.10 A	3.00"x 2.00" x 0.65"	3.0 oz.	Deep Space	
NW-PA-12B01A-D30	1000 - 2500 MHz	18 W	+30 dBm	10 dB	+11 to +32 VDC	1.50 A	3.00"x 2.00" x 0.65"	3.0 oz.	LEO	
NW-PA-05E05A-C04-S01	2300 - 2500 MHz	40 W	0 dBm	44 dB	+27 to +30 VDC	2.70 A	6.00"x 3.50" x 0.91"	9.0 oz.	Deep Space	
NW-PA-05E05A-C01-S03	2000 - 2600 MHz	30 W	0 dBm	44 dB	+27 to +30 VDC	2.70 A	4.50"x 3.50" x 0.61"	9.0 oz.	Slated for Launch	
COREPOWER AMPLIFIER P/N TBD	1200 - 1300 MHz	1000 W	+12 dBm	49 dB	+28 VDC	TBR	12.00" x 10.00" x 2.845"	TBR	Qualification Imminent	
Bidirectional Amplifier Model	Frequency Range	RF Output Power	Drive Level	Tx Gain	Rx Gain (typ)	Supply Voltage	Current Consumption (@ 28 Vdc)	Size (L x W x H)	Weight	Space Environment Heritage
NW-BA-ULS-10-S01-D30	200-2500 MHz	24 W	+30 dBm	13.5 dB	14 dB	+11 to +32 VDC	2.10 A	3.00"x 2.00" x 0.65"	4.0 oz.	Slated for Launch
NW-BA-SCISR-20-C01-S01	L-Band: 1000-2000 MHz	20 W	+30 dBm	13 dB	16 dB	+11 to +32 VDC	2.10 A	7.25" x 4.50" x 1.00"	34 oz. (TBR)	LEO
	S-Band: 2000-2500 MHz			10 dB	12 dB					
	C-Band: 4400-5100 MHz	10 W		10 dB	12 dB	+27 to +32 VDC	1.60 A			
LNA Model	Frequency Range	Gain	Noise Figure	OIP3	Supply Voltage	Current Consumption	Size (L x W x H)	Weight	Space Environment Heritage	
HILNA LS-11	1000 - 3000 MHz	50 dB	1.7 dB	+33 dBm	+5 to +15 VDC	300 mA @ +12 VDC	2.50" x 1.75" x 0.75"	2.5 oz.	Deep Space	
High Power Filters	Frequency Band	Insertion Loss @ Center Freq.	PassBand Flatness	Power Handling	VSWR	L-Band Center Freq.	Size (L x W x H)	Weight	Space Environment Heritage	
TANGO Triplexer	L-Band	0.5 dB	0.5 dB	800 W	1.3:1	L1 - 1575.42 MHz	19.2" x 14.8" x 7.9"	27 lbs	Space Qualified (Vented)	
						L2 - 1227.60 MHz				
						L5 - 1176.45 MHz				
SSPA Combiner Technology	Frequency Range	Combining Efficiency	Power Handling	Harmonic Suppression	Architecture	Current Architecture Designs	Multipaction Event Handling	Space Environment Heritage		
COREPOWER	10% Bandwidth within 1-8 GHz	95-98%	2000 W	40-60 dBc	Scalable N-Way Combiner	4-way & 5-way	>2 kW	Technology Certified Under Multipaction Analysis		

The NuWaves Advantage

- ✓ Proven Heritage across multiple space environments
- ✓ Quick-Turn COTS and MOTS for all Customer Requirements
- ✓ Collaborative Development to Refine Performance and Integration
- ✓ Radiation Tolerant Designs and Ruggedized Expertise

NuWaves RF Solutions specializes in the design, development, and manufacturing of high-performance, space-qualified RF and microwave solutions for defense, aerospace, and commercial satellite missions. Our expertise spans the entire RF signal chain, including radiation-tolerant power amplifiers, bidirectional amplifiers (BDAs), frequency converters, and custom RF filtering. With a flight-proven TRL-9 heritage, NuWaves delivers COTS and MOTS RF hardware designed to operate reliably in LEO, GEO, and deep space environments.

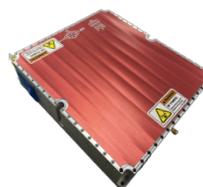
We support advanced satellite programs in domains such as telemetry, tracking, and command (TT&C), deep-space data relay, RF thruster/propulsion, ISR, datalinks, and satellite internet. Our rapid-turn engineering and modular RF designs are ideal for SmallSats, CubeSats, and high-reliability mission platforms supporting global navigation (GPS, Galileo), Earth observation, remote sensing, and radar systems for weather and navigation.



NW-PA-12B01A-D30



Hermetically-sealed HILNA™ GPS Low Noise



Corepower 1KW Power Amplifier



Technologically Advanced N-plexer for GPS III Operation (TANGO)

Modify To Fly - Modifiable Solutions for Space Based Missions



Power Amplifier Model	Frequency Range	RF Output Power	Drive Level	Gain	Supply Voltage	Current Consumption (@ 28 Vdc)	Size (L x W x H)	Weight	
NW-PA-05E05A	2000-2600 MHz	30W	0 dBm	44 dB	27-30 VDC	2.4 A	4.50" x 3.50" x 0.61"	9 oz	
NW-PA-05E05A-C01-S01	2300-2500 MHz	35W	0 dBm	45.9 dB	27-30 VDC	3.9 A	4.50" x 3.50" x 0.61"	10 oz	
NW-PA-11B02A	200-2600 MHz	10W	0 dBm	40 dB	11-32 VDC	1.4 A	4.5" x 3.5" x 1.5"	20 oz	
NW-PA-11B02A-TAC	200-2600 MHz	10W	0 dBm	40 dB	11-32 VDC	1.4 A	4.5" x 3.5" x 1.5"	20 oz	
NW-PA-11B02A-TAC2	200-2600 MHz	10W	0 dBm	40 dB	11-32 VDC	1.4 A	2.34" x 1.96" x 0.62"	2.0 oz	
NW-PA-12B01A	1000-2500 MHz	20W	0 dBm	43 dB	11-32 VDC	1.9 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-01	1000-1500 MHz	17W	0 dBm	42 dB	11-32 VDC	2.4 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-02	1000-2000 MHz	16W	0 dBm	42 dB	11-32 VDC	2.25 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-03	1435-1525 MHz	15W	0 dBm	42 dB	11-32 VDC	2.5 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-04	1435-1850 MHz	15W	0 dBm	42 dB	11-32 VDC	2.3 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-05	1435-2395 MHz	16W	0 dBm	42 dB	11-32 VDC	2.05 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-06	1500-2000 MHz	16W	0 dBm	42 dB	11-32 VDC	2.05 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-07	1500-2500 MHz	16W	0 dBm	42 dB	11-32 VDC	1.9 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-08	1755-1850 MHz	14W	0 dBm	41 dB	11-32 VDC	2.0 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-09	2000-2500 MHz	16W	0 dBm	42 dB	11-32 VDC	1.8 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12B01A-10	2200-2395 MHz	14W	0 dBm	41 dB	11-32 VDC	1.7 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-12D05A	1700-2400 MHz	35W	0 dBm	45 dB	27-30 VDC	2.75 A	4.50" x 3.50" x 0.61"	11 oz	
NW-PA-13G05A	800-2000 MHz	50W	0 dBm	47 dB	27-30 VDC	3.0 A	4.50" x 3.50" x 0.61"	12 oz	
NW-PA-15D05A-C01-S01	800-2500 MHz	20W	0 dBm	44 dB	27-30 VDC	2.7 A	4.50" x 3.50" x 0.61"	13 oz	
NW-PA-L60T01	960-1390 MHz	60W	0 dBm	48 dB	27-30 VDC	3.9 A	4.50" x 3.50" x 0.61"	14 oz	
NW-PA-LS75T01	800-2500 MHz	75W	+3 dBm	45 dB	27-30 VDC	6.5 A	4.50" x 3.50" x 0.61"	15 oz	
NW-PA-U-20-C01-S01	225-1000 MHz	20W	0 dBm	43 dB	11-32 VDC	1.5 A	3.00" 2.00" x 0.65"	3 oz	
NW-PA-VUL-10-C01-S01	30-1000 MHz	10W	-10 dBm	40 dB	11-32 VDC	1.3 A	2.34" x 1.96" x 0.62"	2.0 oz	
Bidirectional Amplifier Model	Frequency Range	RF Output Power	Drive Level	Tx Gain	Rx Gain (typ)	Supply Voltage	Current Consumption (@ 28 Vdc)	Size (L x W x H)	Weight
NW-BA-LS-10-S01	1000-2500 MHz	20W	+5 dBm	38 dB	14 dB	11-32 VDC	2.3 A	3.00" x 2.00" x 0.65"	4 oz
NW-BA-LS-10-S02-D19	1000-2500 MHz	25W	+19 dBm	25 dB	14 dB	11-32 VDC	2.3 A	3.00" x 2.00" x 0.65"	4 oz
NW-BA-DUAL-LS-10-S02-D19	1000-2500 MHz	25W	+19 dBm	25 dB	14 dB	11-32 VDC	2.3 A	3.00" x 2.00" x 0.65"	4 oz
NW-BA-LS-10-S01-D30	1000-2500 MHz	25W	+30 dBm	14 dB	14 dB	11-32 VDC	2.5 A	3.00" x 2.00" x 0.65"	4 oz
NW-BA-DUAL-LS-20-S01-D30	1000-2500 MHz	25W	+30 dBm	14 dB	14 dB	11-32 VDC	2.5 A	3.00" x 2.00" x 0.65"	4 oz
NW-BA-LS-10-C02-S01	1000-2500 MHz	20W	+5 dBm	38 dB	20 dB	11-32 VDC	2.2 A	3.00" x 2.00" x 0.65"	4 oz
NW-BA-LS-20-C03-S01	1000-2500 MHz	20W	+30 dBm	13 dB	20 dB	11-32 VDC	2.5 A	3.00" x 2.00" x 0.65"	4 oz
NW-BA-ULS-10-S01	200-2500 MHz	20 W	+5 dBm	38 dB	14 dB	11-32 VDC	2.0 A	3.00" x 2.00" x 0.65"	4 oz
LNA Model	Frequency Range	Gain	Noise Figure	OIP3	Supply Voltage	Current Consumption	Size (L x W x H)	Weight	
HILNA LS	1000-3000 MHz	50 dB	1.7 dB	33 dBm	5-15 VDC	300 mA @ +12 VDC	2.50 x 1.75 x 0.75	3.0 oz	
HILNA LS-C021-D	1000-3000 MHz	15 dB	1.7 dB	33 dBm	5-15 VDC	300 mA @ +12 VDC	2.50 x 1.75 x 0.75	3.0 oz	



At NuWaves RF Solutions, we specialize in transforming complex RF requirements into production-ready, space-qualified hardware. Our agile engineering team rapidly tailors COTS and MOTS platforms to meet mission-specific needs, reducing lead time and design risk. Whether it's adapting a power amplifier for LEO missions, customizing signal chains for ISR, or developing filtering solutions for Earth observation and radar systems, NuWaves brings ideas to life with speed, reliability, and proven spaceflight heritage.

Our engineering team's flexibility and proven space qualifications make us an ideal partner for developing solutions supporting evolving applications such as deep-space TT&C, telemetry, propulsion RF, and high-bandwidth satellite communications.



NW-BA-ULS-10-S01-D30



HILNA-LS-11



Corepower 1KW L-Band Pulsed Amplifier for Planetary Sensing Radar



SCISR-20 L/S/C Tri-Band Bidirectional RF