



www.keylinkmw.com

Broadband Amplifier
Narrowband Amplifier
RF Pulse Amplifier
RF Amplifier Subsystem

SINCE 2002

PRODUCT CATALOG



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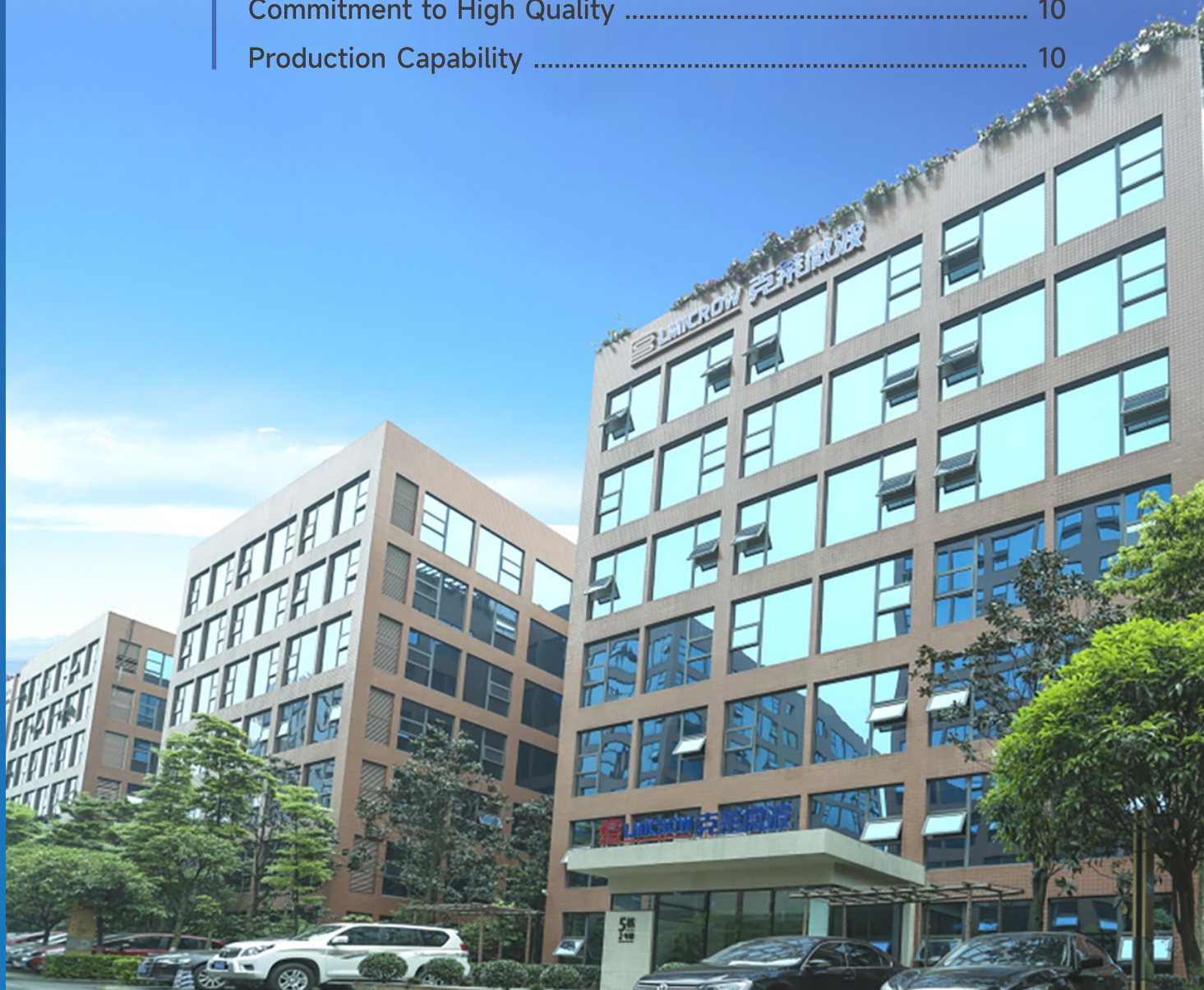
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ABOUT US

Since its inception in 2002, KeyLink Microwave has been devoted to the design, development, and manufacturing of RF & Microwave high power amplifier module and subsystem.

KeyLink provides the most stable ready-to-ship CoTs RF amplifier and the most technologically advanced OEM solutions for radar, jamming, communication system, test and measurement, and other commercial and industrial markets.

HISTORY

- 2022**
 - Staffed with 200+ employees
 - Self-owned plant of 61, 000 square feet
 - 7, 500 square feet Class 100, 000 clean room for MCM
 - 19 invention patents; 28 utility model patents; 37 software copyrights
- 2019**
 - Wholly-owned subsidiary KeyLink Wireless was established in Chengdu for overseas market
- 2017**
 - Annual sales exceed US\$ 19 million
 - First time speech at IMS and got rave reviews
- 2016**
 - Began international business
- 2015**
 - Staffed with 100+ employees
- 2014**
 - First Surface Mount Technology (SMT) line introduced
- 2006**
 - Succeeded in R&D of multi-octave solid state power amplifier
- 2002**
 - Established as KeyLink Microwave

Broadband Amplifier

- ◆ Frequencies from 1MHz to 18000MHz
- ◆ Output power from 5W to 1000W
- ◆ High power, high efficiency, low distortion
- ◆ Small size & light weight
- ◆ Built-in control and protection circuits
- ◆ Radar, communication, jamming, EMC



Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)			
	Min.	Max.								
KB0001003M47A	1	30	50	47	28	5	150	x	90	x 27
KB0001003M53A	1	30	200	53	28	20	200	x	150	x 30
KB002052M43A	20	520	20	43	28	3	120	x	80	x 27
KB002052M47A	20	520	50	47	28	7	150	x	90	x 27
KB002052M50B	20	520	100	50	28	7	150	x	90	x 25
KB002052M53A	20	520	200	53	28	16	200	x	150	x 27
KB00210M43A	20	1000	20	43	28	6	150	x	90	x 25
KB00210M49A	20	1000	80	49	28	10	150	x	90	x 25
KB0510M45A	500	1000	30	45	28	6	150	x	90	x 25
KB0510M47A	500	1000	50	47	28	7	150	x	90	x 25
KB0510M50B	500	1000	100	50	28	13	180	x	90	x 25
KB0525M47A	500	2500	50	47	28	8	150	x	90	x 25
KB0527M43B	500	2700	20	43	28	3	150	x	90	x 22
KB0527M47A	500	2700	50	47	28	8	150	x	90	x 25
KB0727M43B	700	2700	20	43	28	3	150	x	90	x 22
KB0727M47C	700	2700	50	47	28	6	162.6	x	86.4	x 25
KB0727M49A	700	2700	80	49	28	13	180	x	90	x 25
KB0727M50A	700	2700	100	50	28	13	180	x	90	x 25
KB0810M47A	800	1000	50	47	28	7	150	x	90	x 25
KB0810M53A	800	1000	200	53	28	25	200	x	150	x 25
KB0830M45A	800	3000	30	45	28	5	150	x	90	x 22
KB0830M47A	800	3000	50	47	28	6	162.6	x	86.4	x 25
KB0842M47A	800	4200	50	47	28	13	150	x	120	x 25

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)			
	Min.	Max.								
KB1020M47A	1000	2000	50	47	28	8	150	x	90	x 25
KB1020M50A	1000	2000	100	50	28	15	180	x	90	x 25
KB1020M53A	1000	2000	200	53	28	25	200	x	150	x 25
KB1030M47A	1000	3000	50	47	28	7	200	x	120	x 25
KB1060M40A	1000	6000	10	30	28	3.5	180	x	90	x 25
KB2040M50A	2000	4000	100	50	32	15	200	x	150	x 25
KB2060M40A	2000	6000	10	40	28	2	150	x	90	x 25
KB2060M43B	2000	6000	20	43	28	5	160	x	100	x 25
KB2060M46A	2000	6000	40	46	28	6	160	x	100	x 25
KB2060M47A	2000	6000	50	47	28	12	160	x	100	x 25
KB2060M50A	2000	6000	100	50	28	25	200	x	180	x 30
KB20180M37B	2000	18000	5	37	28	3	120	x	80	x 22
KB2560M47B	2500	6000	50	47	28	12	160	x	100	x 25
KB60180M40B	6000	18000	10	40	28	5	120	x	80	x 22
KB60180M43B	6000	18000	20	40	28	7	150	x	90	x 25
KB60180M45A	6000	18000	30	45	28	8	200	x	95	x 17
KB60180M47B	6000	18000	50	47	28	15	180	x	120	x 22
KB80120M43D	8000	12000	20	43	28	6	160	x	120	x 22
KB80120M47B	8000	12000	50	47	24	15	160	x	120	x 22
KB80120M50A	8000	12000	100	50	28	32	180	x	150	x 25

Narrowband Amplifier

- ◆ 1MHz to 18000MHz, 5W to 200W
- ◆ High power, high efficiency, low distortion
- ◆ Small size & light weight, great linearity
- ◆ Radar, communication, jamming, EMC
- ◆ Built-in control and protection circuits

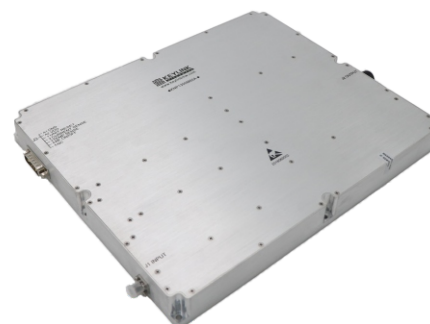


* For other models, please check with KeyLink sales.

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)		
	Min.	Max.							
KN2400M47A	2300	2500	50	47	28	7	150	x	90 x 25
KN2400M53A	2300	2500	200	53	28	26	200	x	150 x 30
KN2450M47A	2400	2500	50	47	28	8	170	x	130 x 30
KN2450M50A	2400	2500	100	50	28	13	170	x	130 x 30
KN2450M53A	2400	2500	200	53	28	24	170	x	130 x 30

RF Pulse Amplifier

- ◆ 1MHz to 18000MHz, 5W to 2000W
- ◆ Pulse width/duty cycle protection
- ◆ Digital interface option
- ◆ Power added efficiency > 10%
- ◆ Duty cycle up to 50%
- ◆ Built-in control and protection circuits



Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Typ. Current (A)	Size (mm)		
	Min.	Max.							
KNP1300M60A	1200	1400	1000	60	50	35	300	x	250 x 30
KNP2060M47A	2000	6000	50	47	28	15	160	x	100 x 25
KNP2060M50A	2000	6000	100	50	28	15	180	x	110 x 25
KNP2900M60A	2700	3100	1000	60	32	25	300	x	240 x 30
KNP2900M63A	2700	3100	2000	63	50	30	300	x	200 x 30
KNP9200M50A	8500	9600	100	50	44	12	180	x	125 x 25
KNP9500M47A	9000	10000	50	47	24	15	160	x	120 x 25
KNP9500M50A	9000	10000	100	50	28	15	20	x	125 x 25
KNP9500M53A	9200	9800	200	53	32	12	150	x	150 x 25

RF Amplifier Subsystem

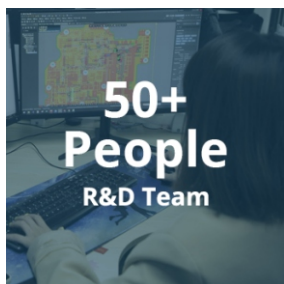
- ◆ Frequencies from 1MHz to 18000MHz
- ◆ Output power from 5W to 2000W
- ◆ Class AB
- ◆ Instantaneous ultra-broadband
- ◆ Compact and robust design
- ◆ Built-in control and protection circuits
- ◆ Suitable for CW, AM, and FM modulation type



* For other models, please check with KeyLink sales.

Model No.	Frequency (MHz)		Pout (Watts)	Power Gain (dB)	Voltage (V)	Mode	Size (mm)
	Min.	Max.					
KB00810S45A	80	1000	30	45	100~260VAC	CW/FM/AM	19", 2U
KB00810S55A	80	1000	300	55	100~260VAC	CW/FM/AM	19", 2U
KB1020S55A	1000	2000	300	55	100~260VAC	CW/FM/AM	19", 5U
KB1060S45A	1000	6000	30	45	100~260VAC	CW/FM/AM	19", 4U
KB2060S45A	2000	6000	35	45	100~260VAC	CW/FM/AM	19", 2U
KB2060S49A	2000	6000	80	50	100~260VAC	CW/FM/AM	19", 4U
KB2060S53A	2000	6000	200	53	100~260VAC	CW/FM/AM	19", 5U
KB20180S37C	2000	18000	5	37	100~260VAC	CW/FM/AM	19", 2U
KB60180S47A	6000	18000	50	47	100~260VAC	CW/FM/AM	19", 2U
KB80120S50A	8000	12000	100	50	100~260VAC	CW/FM/AM	19", 5U
KNP1300S57A	1200	1400	500	57	100~260VAC	Pulse	19", 2U
KNP2900S57A	2700	3100	500	57	100~260VAC	Pulse	19", 4U
KNP2900S60A	2700	3100	1000	60	100~260VAC	Pulse	19", 4U
KNP9500S50A	9000	10000	100	50	100~260VAC	Pulse	19", 2U

R&D Team



- ◆ Talented team consisting of 3 Doctors, 10 Masters and 37 Bachelors
- ◆ Chief engineers with 20+ years' experience in designing RF/MW SSPA
- ◆ Design with state-of-the-art GaN, GaAs, LDMOS and bipolar device technologies

R&D has always been put into a strategic position by KeyLink.

In order to apply the latest technologies to products, KeyLink maintains and upgrades all R&D hardware and software facilities annually. We encourage and support the further education of our employees and have carried out a plan for talents development. We also send engineers to communicate with domestic and foreign universities, research institutes, etc. Meanwhile, every year we participate in various large microwave exhibitions such as IMS, EuMW, etc.

In design stage, lots of CAD tools are used by us, for instance, electromagnetic simulation software, thermal simulation software, structural simulation software.

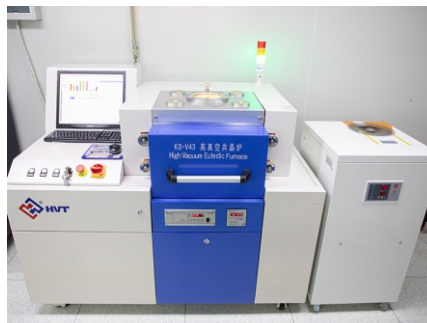
KeyLink's high power combiners can reach over 90% efficiency and 100kW combined power. KeyLink's digital pre-distortion platform and RF pre-distortion technology can greatly improve communication quality, allowing power amplifiers to maintain over 35% efficiency with EVM characteristics less than 2% at 40MHz signal bandwidth. MCM technology and the selection of high-efficiency GaN components have also improved our miniaturization technology.

Advanced Equipment



SMT Machine

Inclusions/voids are reduced by 99%



High Vacuum Eutectic Furnace

Product welding void rate<3%



Laser Welding Machine

Highly gas-tight and challenging environment compliant to ensure quality and stability



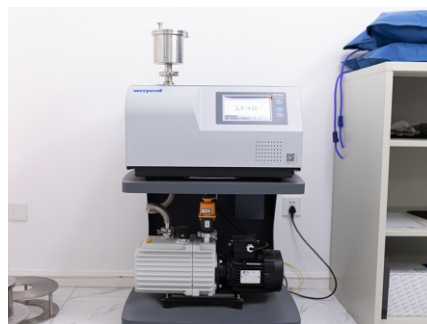
Gold Wire Bonding Machine

Eutectic die mounting with forming gas environment. Gold & Silver epoxy die attach



Automatic PCB Cleaning Machine

Improve PCB cleaning efficiency and reduce labor costs



Helium Leak Detector

Tiny leaks can be detected accurately
Operation errors are reduced by a fail-safe system



Tensile Testing Machine

Used for failure analysis in microelectronic, microelectronic packaging, PCAB and other electronics manufacturing.



Vibration Test Chamber

Well-designed dynamic circle skeleton, with a higher stage axial resonance frequency

Why KeyLink?

1. Hot sale models in stock. CoTs delivery 1~4 weeks
2. Warranty: 3~5 years; free within 18 months
3. ISO9001 and 6S standards for production
4. Production capacity of 3000 pcs per month
5. Systematic management to supply chain
6. 40+ serving markets and 200+ cooperative companies
7. ISO, CE, RoHs, REACH certificates
8. One-stop solution of RF SSPA: R&D, production, supply, after-sales, OEM/ODM available

Certificates



Company Culture

Motto

Honesty and Win-Win Cooperation

Purpose

Focus on your application

Mission

Being the most professional supplier of RF and Microwave products

Vision

A global leader in the area of RF and Microwave applications

Commitment to High Quality

Strong QC Team

KeyLink has a professional QC team of 30 technicians to guarantee our reputation and high performance of solid state power amplifiers.

Strict Inspection

We perform 100% visual/mechanical/electrical inspection on all incoming materials. Vendors and materials are continuously evaluated to ensure compliance to set quality standards. During and after production, strict inspection is also executed. Every data on our test report is verified by QC technicians.

Traceable Production

A production tracking system has been designed to ensure traceability of relevant data for each item. The full process tracking record, which perfectly fits with the supply chain management system, enables more support for goods control and improves overall product quality and management efficiency.

Production Capacity

1. 7 production lines in total, which are well designed and environmentally friendly.
2. All production employees have relative technical certificates.
3. Advanced equipment like SMT machine, laser welding machine, High Vacuum Eutectic Furnace, Fully Automatic PCB Cleaning Machine, etc.
4. From assembly, wire bonding, initial electrical test & inspection, temperature cycling, burn-in test, low-high-normal temperature test to the last electrical test, each step strictly follows ISO9001 quality management system and 6S standards.





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