

## Ka Band SSPA 10W~600W Series

### SSPA Feature

- Output power range: 10W~600W
- High linearity
- Remote control via RS485/422 or Ethernet
- Forward and reverse power detection
- Output sampling
- Protection against thermal run-away
- Integrated band filter
- Products can be used outdoors



Ka band 50W solid state power amplifier can

be used in satellite communication, data link, measurement and control field

### Option:

- 1:1 or 1:2 Redundant Configuration
- Adopted phase synthesis system for higher power input
- L band input(SSPB/BUC type)
- Harmonic filter

### Product description:

Ka-Band solid state power amplifier can be used in satellite communication ground station, data link, measurement and control, electronic warfare and other fields. It also can be used as a single component, or adopted phase synthesis to obtain higher output power to replace the traveling wave tube amplifier. Product frequency coverage from 27.5Ghz to 31Ghz, the output power range from 10W to 600W. The product is suitable for ground, vehicle, carrier, airborne, etc.

### Product Feature

The series of solid state power amplifier products integrated monitoring system, power supply system and cooling system. Built in monitoring system to provide forward / echo output power detection, temperature detection, remote switch machine, over temperature protection, VSWR protection, real-time monitoring of power amplifier voltage and current function. The monitoring system is communicated with the terminal computer through the serial port RS485/422/LNA, and all the test data are displayed on the computer terminal in real time.

The high power amplifier series products can replace a hundred watt traveling wave tube (TWTA) to solve the localization problem.

The output power can be customized according to customer requirements, continuous wave output power up to 1KW, the need for higher output power, greater bandwidth please kindly contact us.

**Shaanxi Probecom Microwave Technology Co.,Ltd**

Address: Floor 12, Inland Port Mansion, Xi'an International Trade and Logistic Park, Xi'an, Shaanxi, China 710026  
Tel: +86-29-88451625 88451755 Fax: +86-29-88860260 E-mail: [sales@probecom.com](mailto:sales@probecom.com); [sales@probecom.cn](mailto:sales@probecom.cn)

**General Technical Index**

Operating Frequency	29GHz~31GHz/27.5GHz~31GHz		
Output power	10W~600W		
Gain	60dB		
Gain adjustment range	20 dB in 0.2dB steps		
Gain flatness (full band)	± 2 dB max.		
Gain flatness (40MHz)	±0.3 dB max.		
Gain variation over temperature	±2dB max		
Input VSWR	1.8:1(max)		
Output VSWR	1.8:1(max)		
Spurious	-60 dBc max.		
Harmonics	-40dBc@P1dB		
AM/PM conversion	4°/dB@P1dB (max)		
Three order IMD	-25dBc at 4dB total back-off from rated P1dB		
Group delay	1nsec p-p max		
Phase noise degradation	2dB (max)		
Noise power density	-70dBW/4kHz (Transmit Band) ; -150dBW/4KHz (Receive Band)		
Power supply	220VAC/48VDC/28VDC		
Cooling system	Cool air/cold liquid (optional)		
Interface	RF input		K-F
	RF output		waveguide WR28
	RF output sampling		K-F
	Communication and control interface		Navigation plug
	Power supply interface		Navigation plug
Environmental	Operating temperature		-40°C ~ +55°C
	Storage temperature		-55°C ~ +88°C
	Humidity		5% to 95% non-condensing
	Can meet Vehicle / carrier / airborne requirement		