

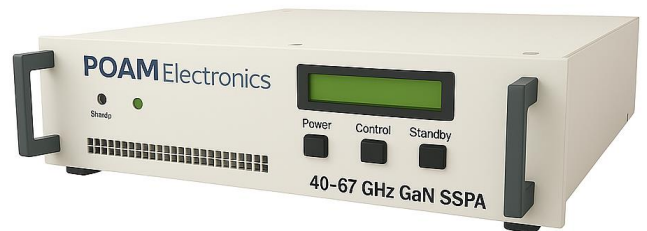
The PA52G65G45V6 is a high-performance wideband AC power amplifier operating across a frequency range of 52 to 65 GHz. It delivers a typical output power of 46.5 dBm, with a typical small-signal gain of 55 dB and excellent gain flatness of ± 4.0 dB.

Designed for convenience and reliability, the amplifier operates from a standard 110V/220V AC power supply. Both the cooling fan and heatsink are fully integrated within the unit, ensuring efficient thermal management in a compact form factor.

The amplifier features 1.85mm female connector for input and WR15 for output and supports an operating temperature range of -40°C to $+70^{\circ}\text{C}$, making it suitable for demanding lab and field environments.

Product Features:

- Wide Band Rack mounted Power Amplifier
- Small Signal Gain 55dB Typical
- Output Saturation Power 46.5dBm
- Supply Voltage 110/220 VAC
- 50 Ohm Matched Input/Output
- Overcurrent and Temperature Protection
- Monitor and control via Serial or Ethernet port



Application:

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- 5G Wireless Communications
- Microwave Radio Systems
- Research and Development
- Cellular Base Stations
- Space Science application

Electrical Specifications (T_A=+25°C)

Parameter	Typ	Units
Frequency Range	52– 65	GHz
Minimum Small Signal Gain	55	dB
Minimum Saturated Output Power (P _{sat})	46.5	dBm
Gain Variance	+/- 4	dB
Gain Variation Over Temperature	+/- 2	dB
Output 1dB Compression Point (P _{1dB})	42	dBm
Turn On/Off Speed (Drain)	500	us
Input Return Loss	-10	dB
Spurious	-50	dBc
Operating voltage	110 to 240	VAC
Supply Current	2	A
Weight	17	Kg
Size	3U standard rack	--
Input / Output Impedance	50	Ohms
Input / Output Connectors	1.85mm (F) / WR15	

Environmental Specifications

Parameter	Description
Operational Temperature	-40°C to +70°C
Storage Temperature	-50°C to +90°C
Humidity	20% – 80% RH, non-condensing
High-Temperature Burn-In	Temperature +85°C for 72 Hours
IP rating	IP-20

Handling Precautions



Caution!
ESD-Sensitive Device

RF VOLTAGE HAZARD: Contact with RF fields at the output connector can cause burns or electric shock. High levels of RF/Microwave energy may be present when the unit is operating.

HIGH DC CURRENT HAZARD: High levels of DC current are present when the unit is operating.

Each amplifier is
shipped in a hard and
well-protected carry case.



Contact Information

For the latest specifications, additional product informat

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