



PA100W-700-6000M GaN RF Power Amplifier

Technical summary with 2000-6000MHz single-sample test evidence

Model: PA100W-700-6000M



The catalogue specification covers 700-6000MHz. The attached source test record covers 2000-6000MHz only; it must not be interpreted as test evidence for the unmeasured 700-1900MHz portion.

700-6000MHz
specified range

≥ 50 dBm
typical output

32V DC
supply

FWD / REV
power detection

PUBLICATION SCOPE

Catalogue values describe the product platform. Recorded sweep values describe one sample under the noted source conditions. Final ordered-model limits, cooling, connectors, control logic and acceptance criteria must be confirmed in the signed specification.

RFQ checklist

Send the target frequency segments, required output or EIRP budget, input drive, duty cycle, supply, cooling method, control interface, connector and cable plan, environmental limits, quantity, destination and acceptance method. Contact sale@droneanti.com or use droneanti.com/contact.



Verified public specification

Values below were reconciled against the reference catalogue definition and the available source specification. Ambiguous control polarity was not converted into a public guarantee.

Parameter	Verified public value
Product model	PA100W-700-6000M
Technology	GaN wideband RF power amplifier module
Specified frequency range	700-6000MHz
Operating bandwidth	5300MHz
Typical output	$\geq 50\text{dBm}$ catalogue specification
Recorded sample sweep	48.95-53.05dBm from 2000-6000MHz
Power gain	$\geq 50\text{dB}$
Gain flatness	Within $\pm 5\text{dB}$
Maximum input power	$\leq +10\text{dBm}$
Spurious emissions	$\leq -60\text{dBc}$
Harmonic suppression	$\leq -10\text{dBc}$
Input / output VSWR	$\leq 2.0:1$ / $\leq 2.2:1$
Supply voltage	32V DC
Maximum power consumption	$\leq 600\text{W}$
Protection and monitoring	Temperature protection; forward and reverse power detection
ON / OFF control	High level ON; low level OFF
RF connector	SMA-KF
Weight	$\leq 3\text{kg}$
Operating / storage temperature	-10°C to $+40^{\circ}\text{C}$ / -55°C to $+70^{\circ}\text{C}$

Important

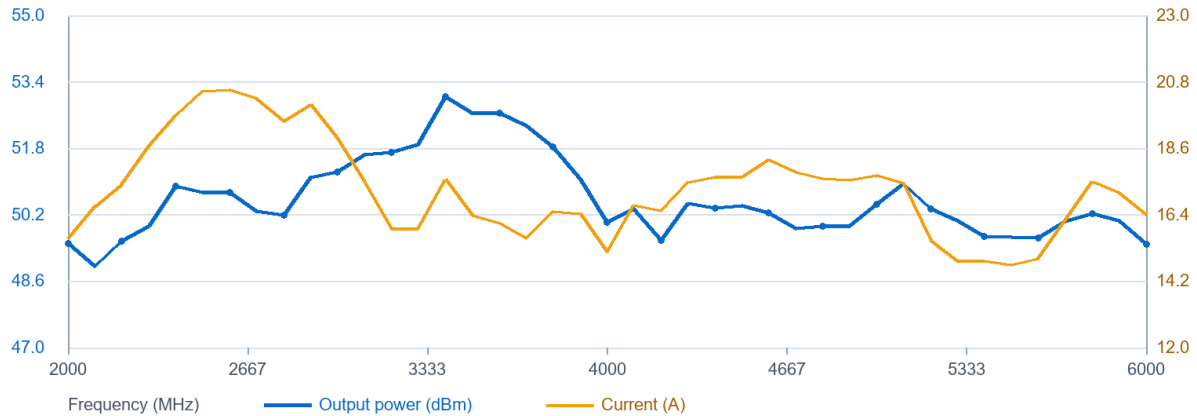
RF output is frequency-, drive-, thermal- and load-dependent. Cooling plate temperature, connector loss, reflected power and duty cycle can change measured results. Request an acceptance table for the exact ordered revision.



Source test evidence

Single sample dated 2025-03-12, recorded at 100MHz steps with 32V DC supply. The source record contains conflicting input-drive annotations, so the drive level is intentionally not repeated here and must be confirmed during acceptance testing.

Recorded 2000-6000MHz output sweep



48.95dBm	53.05dBm	14.75-20.54A	2025-03-12
recorded minimum	recorded maximum	recorded current	source record

Frequency	Output	Current
2000MHz	49.51dBm	15.59A
2600MHz	50.73dBm	20.54A
3300MHz	51.89dBm	15.94A
4000MHz	50.01dBm	15.16A
4700MHz	49.86dBm	17.82A
5400MHz	49.67dBm	14.88A
6000MHz	49.48dBm	16.42A



Source bench photograph: the displayed 49.51dBm reading corresponds to the recorded 2000MHz row. Photograph has been rotated for readability; no measurement value was altered.

Use boundary

This summary supports supplier evaluation and RFQ preparation. It is not a calibration certificate, conformity certificate, export authorization or guarantee for a different model revision. Professional integration and local radio compliance remain the buyer's responsibility.