



700-2700MHz 50W-Class GaN RF Power Amplifier

Technical summary and single-sample sweep record

Model: 50W-700-2700MHz

This publication follows the verified product definition used by the reference catalogue: a 50W-class GaN platform with at least 30W typical output. It does not describe the unit as a guaranteed 50W output at every frequency.



700-2700MHz
frequency range

$\geq 30W$
typical output

32V DC
supply

2-5us
TTL switching

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	50W-700-2700MHz
Technology	GaN RF power amplifier module
Frequency range	700-2700MHz
Typical output	$\geq 30W$; 45-47dBm public catalogue range
Power gain	35dB at 10dBm input
Gain flatness	± 1.0 to ± 2.0 dBpp at 10dBm input
Input return loss	-10dB typical; -5dB limiting value in source specification
Supply voltage	32V DC
Quiescent current	1.2-1.7A
Current at 10dBm input	5.0-6.5A in source specification
Switching time	2-5 μ s
TTL logic	Polarity and control connector must be confirmed for the ordered revision
Operating temperature	-20°C to +85°C catalogue range
Reference dimensions	72 x 50.8 x 16.6mm in the recorded sample
RF connectors	SMA female input and output in the recorded sample

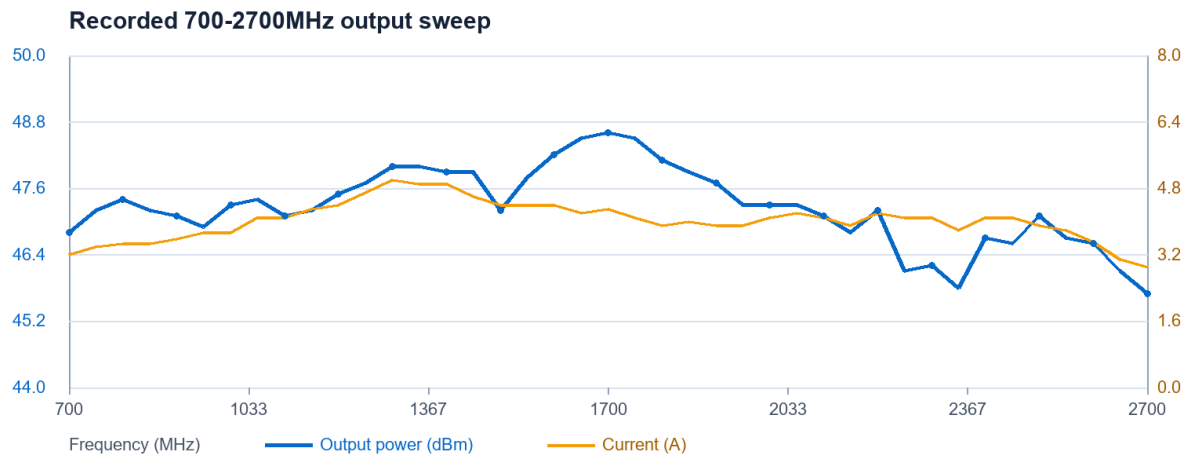
Important

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 recorded sample. The source table states 10dBm input and 32V DC supply. Values are not a statistical production tolerance.



45.70dBm	48.60dBm	2.90-5.00A	Source record without a printed test date
recorded minimum	recorded maximum	recorded current	source record

Representative sweep rows

Frequency	Output	Current
700MHz	46.80dBm	3.20A
1000MHz	47.30dBm	3.74A
1350MHz	48.00dBm	4.90A
1700MHz	48.60dBm	4.30A
2050MHz	47.30dBm	4.20A
2400MHz	46.70dBm	4.10A
2700MHz	45.70dBm	2.90A

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.