



ICADP4251-8

PRODUCT SUMMARY



4.2 – 5.1 GHz 8 W

LINEAR POWER AMPLIFIER

ICADP4251-8 is a wide operational bandwidth linear power amplifier designed for drone applications and small cells in the frequency range of 4200 MHz to 5100 MHz. The device is fully matched at input and output. It is realized in GaAs technology and overmolded in a compact 16-pin 5 × 5 mm² LGA package that is pin-to-pin compatible with other iCana 8W power amplifiers.

This amplifier is optimized for high-reliability drone communications to provide maximum output power at target EVM levels while still providing excellent efficiency.

Key Features

- Wide operational frequency range: 4200 – 5100 MHz
- High output power: P_{out} > 33 dBm
- High gain: 44.2 dB
- Resistant to high VSWR output mismatch: 10:1
- Pin-to-pin compatible PA family
- 50 Ω matched input and output
- Compact package size: 5.0 × 5.0 × 1.1 mm³

Typical Applications

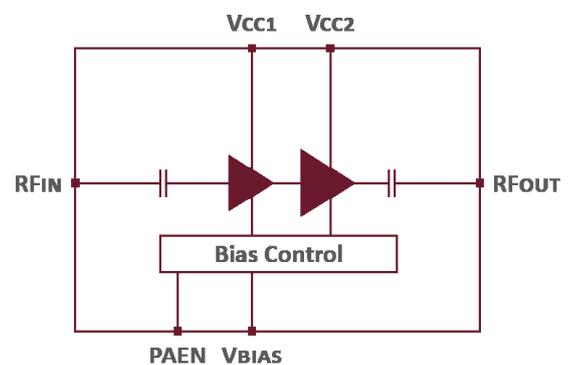
- High reliability drone communications
- Ground stations
- Small cells

Ordering Guide

Part Name	Description
ICADP4251-8	4.2 – 5.1 GHz 8 W Linear Power Amplifier
ICADP4251-8-EVB	ICADP4251-8 Evaluation Board



16 Pad 5 × 5 mm² LGA Package



Functional Block Diagram

8 W PA Product Family

Product Name	Description
ICASP3338-8F	3.3 – 3.8 GHz
ICADP4251-8	4.2 – 5.1 GHz

REV 1.0

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