

High-Power WLAN 802.11a/b/g/n Power Amplifier MMICs

Tailored specifically to meet the demands of IEEE802.11a/b/g/n wireless LAN (WLAN) fixed product transmitters, the family of high-power power amplifier (PA) ICs from RFMD offers a combination of unmatched reliability, RF output power and ultra-linear performance.

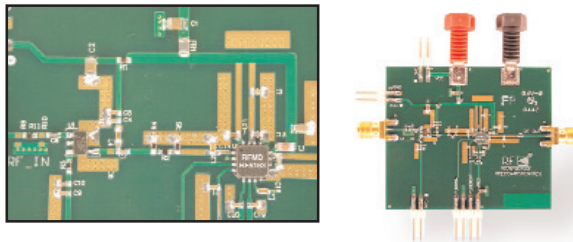
Using any member of RFMD's high-power PA IC family within state-of-the-art IEEE802.11a/b/g/n WLAN access points (APs), routers, home gateways, storage area networks (SANs) and set-top-boxes (STBs) ensures the highest reliability, longest office environment range, and maximum number of client users possible today.

RFMD's portfolio of ultra-linear PA MMICs includes the RF2163, RF5163 and RF5163 with driver (RF5163 and RF2373). The RF2163 and RF5163 are two-stage devices. The RF5163 with driver includes the RF2373, which utilizes a single amplification stage and is an ideally suited WLAN driver amplifier for the RF5163. All of these solutions are developed using RFMD's proven high-linearity AlGaAs HBT process technology.

The newest additions to the high-power PA IC lineup include the RF5263 and RF6165, both developed using RFMD's industry-leading, high-efficiency InGaP HBT technology process. Designed for applications requiring >30 dB gain in the 2.4 to 2.5 GHz frequency range, combined with ultra-linear performance, the RF5263 is a three-stage amplifier that provides exceptional efficiency and gain flatness over frequency, temperature and process. For applications requiring 44 dB or more gain, an RF5263WD "with driver" solution is available consisting of the RF2373 or RF5373 driving the input of the RF5263.

Designed for the most demanding fixed application products requiring a combination of high transmit power and ultra-linear performance in the 4.9 to 5.85 GHz frequency band, the RF6165 is the newest addition to RFMD's growing family of high-power PA ICs. For applications requiring >35 dB gain while simultaneously providing exceptional transmit power and ultra-linear performance, the RF6165WD ("with driver") solution is available. The RF6165WD employs the RF5373, driving the input of the RF6165.

RF5163 with Driver



Performance Summary

RFMD Part	RF P _{OUT} (dBm)	Gain (dB)	EVM (%RMS, Mean) @54 Mhps	Package
RF2163	26	18	3.1	QFN16, 4x4mm
	29	18	7.9	

Applications:

- 802.11a/b/g/n WLAN access points
- Routers
- Home gateways
- Storage area networks
- Set-top boxes

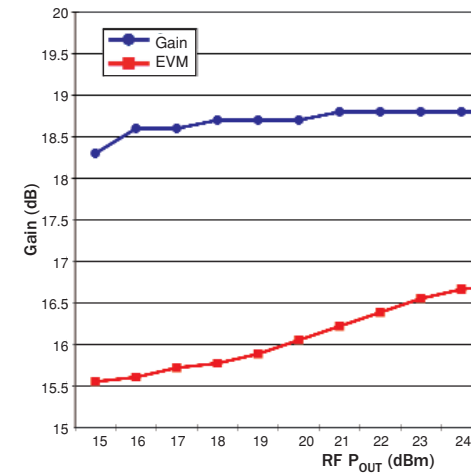
Complete Line of Wireless Networking Front-End Products

RFMD offers a comprehensive line of industry standard wireless networking solutions. From single- and dual-band WLAN and Bluetooth® high-performance, low-cost low noise amplifiers (LNAs) to complete single- and dual-band WLAN front-end modules, RFMD's flexible product portfolio provides the solutions customers need to react quickly to changes within the constantly evolving WLAN market.

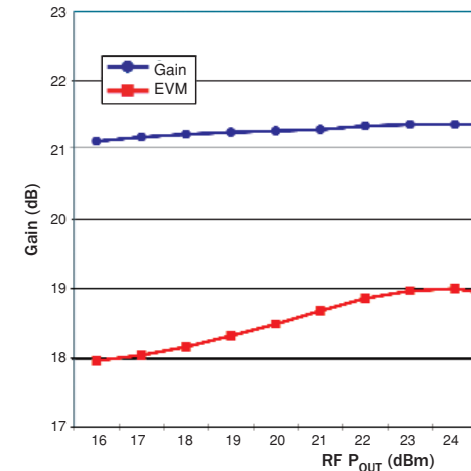
RFMD Wireless Networking Front-End Products

WLAN	RF5924
Front-End Modules (FEMs)	802.11b/g/n
Dual-Band WLAN PA MMIC	RF5824
High-Power 802.11b/g/n WLAN PA MMICs	RF2163 RF5163 RF5163WD RF5263 RF5263WD
Medium-Power 802.11g/n WLAN PA MMICs	RF5117 RF5122 RF5125 RF5126 RF5152 RF5189

RF2163 EVM & Gain vs RF P_{OUT} (54)



RF5163 EVM & Gain vs RF P_{OUT} (54)



RF6165 WLAN a/n EVM vs RF P_{OUT}

