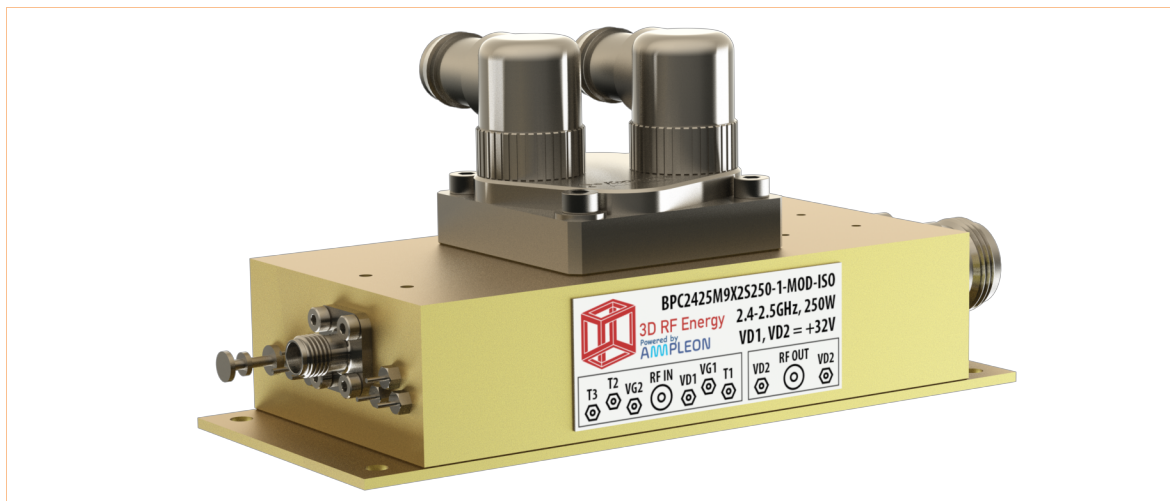


# BPC2425M9X2S250-1-MOD-ISO

250W 2.45GHz 2-stage PA module with isolator

Rev. 1 — 1 November 2018

Product brief



The BPC2425M9X2S250-1-MOD-ISO is a compact 250W, 2.45GHz power amplifier module designed for CW industrial applications. It integrates an Ampleon BPC2425M9X2S250-1 production pallet with a robust housing, filtering, internal isolator, and RF connectors, making it suitable for system integration as well as pallet evaluation.

## Specification summary

### RF characteristics

output power	290 W typical at $P_{L(1dB)}$ [1]
frequency range	2.4 to 2.5 GHz
gain	32 dB typical at $P_{L(1dB)}$ [1]
efficiency	55% typical at $P_{L(1dB)}$ [1]
safe load mismatch	unlimited (internal isolator)

### Control, monitor, power interfaces

bias inputs	VG1 (driver stage), VG2 (final stage)
temperature sensor outputs	1.5 k $\Omega$ NTC thermistors; T1 (driver stage), T2 and T3 (final stage)
DC power inputs	+32 V, $\leq 18$ A at $P_{L(3dB)}$ ; VD1 (driver stage), VD2A and VD2B (final stage)

### Physical & environmental

mass and size	1 kg; 102 x 51 x 26 mm, exclusive of connectors and cold plate
operating temperature	0 to 60 °C mounting surface
cooling	external liquid (cold plate) or forced convection (heatsink); high-efficiency cold plate supplied with module
cold plate fittings	female G1/4; right-angle adapters included for 1/4" and 3/8" tubing
cold plate thermal resistance	0.044 °C/W typical at 5 l/m

[1] CW performance at  $T_{mb} = 25^{\circ}\text{C}$ ,  $V_{DS} = 32\text{V}$ ,  $I_{DQ1} = 25\text{mA}$ ,  $I_{DQ2} = 50\text{mA}$

