

CPI 400 Ku-Band TWTA: Efficient, Lightweight, Compact

COMPARE against competitor GaN 400 W SSPA

This chart compares CPI's Ku-Band 400 W SuperLinear® TWTA against a GaN-based 400 W solid state HPA, based on published data. The CPI product is superior by every measure. These are hub-mount products. For more information, contact your local CPI representative today or visit us at www.cpii.com/satcom.

	CPI 400 W SuperLinear® Ku-band TWTA		Competitor 400 W Ku-band GaN SSPA	
Operating Bandwidth	Ku-Band to 1750 MHz	✓	Ku-Band up to 750 MHz	
PLINEAR <i>where IMD = -25 dBc or better, sum of two EQUAL carriers</i>	200 W (53.0 dBm) min.	✓	178 W (52.5 dBm) min.	
Power Consumption	770 W at PLINEAR	✓	2400 W at PLINEAR	
Power Efficiency at Plin	25.9%	✓	7.5%	
Operating Cost per Year		✓	3.1x more expensive	
Cost per Linear Watt per Year		✓	3.5x more expensive	
Heat Dissipation at Lin OP	800 W max.	✓	2,200 W typ.	
Weight	14.6 kg (32 lbs)	✓	54.1 kg (119 lbs)	
Size	24.86 cubic dm (1,517 cubic inches)	✓	87.82 cubic dm (5,359 cubic inches)	

Summary: CPI's Ku-band 400 W SuperLinear TWTA is a more powerful amplifier than the GaN SSPA, yet it consumes far less power and is more than three times as efficient, resulting in less heat dissipation, better reliability, and lower power costs per linear watt produced. The CPI product is also smaller and lighter despite the advantage in output power.