

COMPARE the SuperLinear® 500 W X-Band BUC to a 500 W GaN-Based BUC

This chart compares CPI's X-Band SuperLinear® Outdoor TWT BUC against a comparable GaN-based BUC, based on published data. For more information, contact your local CPI representative today or visit us at www.cpii.com/satcom.

	CPI TL05XO 500 W TWT BUC		500 W GaN-Based BUC	
Operating Freq. (GHz)	7.9 - 8.4 GHz		7.9 - 8.4 GHz	
PLINEAR where IMD = -25 dBc or better with two equal carriers	200 W (53.0 dBm) w/lin	✓	200 W (53.0 dBm)	
Power Consumption	1100 W at PLINEAR	✓	1700 W at PLINEAR	
Power Efficiency at Plin	18.2%	✓	11.8%	
Operating Cost per Year		✓	55% more expensive	
Cost per Linear Watt		✓	55% more expensive	
Heat Dissipation at Lin	900 W max.	✓	1500 W max.	
Weight	39 lbs (17.7 kg)	✓	57.3 lbs (26 kg)	
Volume	23.7 cubic dm (1,445 cubic inches)	✓	30.6 cubic dm (1,866 cubic inches)	

Summary: CPI's 500 W SuperLinear® TWTA costs 1/3 less to operate, and the GaN BUC is 30% larger and weighs 50% more than the comparable SSPA.