



AntBUC® SUPER HIGH POWER DENSITY 150W / 200W KU-BAND GAN BUC / SSPA

Smaller, Lighter and more Powerful Next Generation AntBUC® Series allows significant high power BUC / SSPB / SSPA size and weight reduction and at the same time substantially improves thermal efficiency, which leads to higher reliability and longer MTBF.

That's why IRT offers 3 years warranty for this product line! The Next Generation IRT Technologies powered by GaN Technology 150W / 200W Ku-Band AntBUC® Series are very compact, light and extremely powerful. Using patent pending Z-combining method and advanced GaN technology new IRT 150W / 200W AntBUC® has truly outstanding power density - up to 200W PSAT in this super compact 15.5" x 10" x 6.3" package weighing only 28 lbs. IRT 150W / 200W Ku-Band AntBUC® features best in class RF characteristics, RF sample port, true RMS power measurements, extensive monitoring and control capabilities enabled via Ethernet, Serial and/or Analog Interfaces. 150W / 200W AntBUC® remarkably compact size and high thermal efficiency results in overall system size and cost reduction making it the ideal candidate for mobile and fixed VSAT applications.



KEY FEATURES

- Up to 200W PSAT
- Superior RF performance
- RF Overdrive Protection
- Available in both standard and Extended Ku-Band
- Field upgradable software
- Internal / Autosense 10MHz Reference Options
- Switchable LO option - Standard and Extended Ku- Band in one unit
- Input and Output True RMS Power Detection
- Configuration via RS-232 serial console, packet protocol RS-485
- Automated Level Control (ALC) Option
- Redundant ready - No External Redundancy Controller Required
- Status LED
- Antenna Mounting kit Optional

RF PERFORMANCE (1/2)

RF Freq. Range-Available in/switched	14-14.5GHz / 13.75-14.5GHz	
IF Frequency Range	950-1450MHz / 950-1700MHz	
LO Frequency (Switchable)	13.05GHz / 12.8GHz	
Conversion	Single Conversion; non-inverting	

	150W	200W
Saturated Power	52dBm typ	53dBm typ
Linear power	49dBm typ	50dBm typ
Conversion Gain	75dB min, 77dB typ	
Gain Flatness	+/-1dB typ +/-1.5dB max over full band; +/-0.5dB max over any 40MHz	
Gain Stability over temperature	+/-1.5dB over full temp. range	
Gain Stability over input power	3dB typ 4dB max from 10dB back off to rated power	

Gain Control	20dB min dynamic range
External Reference Frequency	10MHz multiplexed with IF In
External Reference Required	-130dBc/Hz @ 100Hz
Phase Noise	-140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -155dBc/Hz @ 100 kHz

Up-Converter Phase Noise	-68dBc/Hz @ 100Hz; -80dBc/Hz @ 1kHz; -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz
--------------------------	---

RF PERFORMANCE (2/2)

Linearity:	-24dBc at P linear
2 tone IMD Spectral Re-growth	-30dBc for QPSK at 1.5xsymbol rate at Plinear +1dB
Noise Power Density:	
Transmit Band	-85dBm/Hz max
Receive Band	-148dBm/Hz max
Output Spurious:	
Non-signal related	-60dBc
Signal related	-55dBc

POWER

AC Voltage Range	90-265VAC 50-60Hz auto-ranging PFC	
	150W	200W
Power Consumption at rated power	1000W	1150W
Power Consumption 3 dB back off	600W	800W

MECHANICAL

Size	15.4" x 9.9" x 7.6"
Weight	28lbs
Cooling	Forced Air
Operating Temperature	-40 C to +55 C
Relative humidity	Up to 100% condensing

INTERFACES

IF Input Connector	N-type female
RF Output Connector	WR75 Grooved
RF Sample	N-type female
AC Power In	MS3112E12-3P
M&C Interface-Serial, Analog	MS3112E14-19S
Redundant Interface	MS3112E14-19P

PART NUMBERING INFORMATION

AC Power Supply 150W	TPB-KXB0520-HMSO
AC Power Supply 200W	TPB-KXB0530-HMSO

