

AntBUC®

SUPER HIGH POWER DENSITY 150W / 200W C-BAND GAN BUC / SSPA



Smaller, lighter and more Powerful AntBUC® series allows significant high power BUC 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 IRT Technologies powered by GaN technology 150W / 200W C-Band AntBUC® series are very compact, light and extremely powerful. Weighing at only 22 lbs, this new C-band 150W / 200W AntBUC® product family is the most powerful and feature rich for its size: up to 200W at saturated power. IRT AntBUC® features best in class RF characteristics, RF sample port, true RMS power measurements, extensive monitor and control capabilities enabled via Ethernet, Serial and/or Analog Interfaces. 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

- Extremely high power density - up to 200W Psat in 15.3" x 8.7" x 4.2" only!
- Superior RF performance:
 - ✓ Phase noise 8-10dB better than IESS308/309
 - ✓ Psat up to 54 dBm
 - ✓ Spurious below -60dBc
 - ✓ Wide dynamic range of Gain Control
 - ✓ High linearity
- RF Overdrive Protection
- Available in various C-Band frequency options
- Field upgradable software
- Internal 10MHz reference optional
- Input and Output True RMS Power Detection
- Configuration via RS-232 serial console, packet protocol RS-485 - User friendly HTTP based GUI and SNMP
- Automated Level Control (ALC) Option
- Redundant ready - no external redundancy controller required.
- 48VDC isolated power supply option
- Status LED

150W / 200W C-Band Block-Up-Converter GaN Specification

Parameter	150W		200W	
RF Performance				
RF Frequency Range-Available in/switched:	5.85-6.425GHz (other frequency options available0			
IF Frequency Range	950-1525MHz			
LO Frequency	4.9GHz			
Conversion	Single Conversion; non-inverting			
Saturated Power	52dBm typ		53dBm typ	
Linear power	49dBm min		50dBm min	
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 temperature 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 Phase Noise	-130dBc/Hz @ 100Hz	-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			
Linearity: 2 tone IMD Spectral Re-growth	-25dBc at P linear -30dBc for QPSK at 1.5xsymbol rate at Plinear+1dB			
Noise Power Density:	Transmit Band	Receive Band		
		-85dBm/Hz max -150dBm/Hz max		
Output Spurious: Non-signal related	-60dBc			
Signal related	-55dBc			
Power				
AC Voltage Range	90-265VAC 50-60Hz auto-ranging PFC			
Power Consumption at rated power	850W		1000W	
Power Consumption at 3 dB back off	650W		750W	
48VDC Isolated optional	40-72VDC Isolated			
Mechanical				
Size	15.375 "x 8.750" x 4.250" (18.625" x 8.750" x 4.250" with output circulator)			
Weight	26lbs			
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	CPR137 grooved			
RF Sample	N-type female			
AC Power In	MS3112E12-3P			
M&C Interface-Serial, Analog and Ethernet	MS3112E14-19S			
Redundant Interface	MS3112E14-19P			
Part Numbering Information				
AC Power Supply	150W TPB-CB00520-HMS0		200W TPB-CB00530-HMS0	

*Contact us for detailed ordering information at sales@irttechnologies.com

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