

AntBUC® SUPER HIGH POWER DENSITY 300W / 400W 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 new IRT Technologies 300W / 400W C-Band AntBUC® series are very compact, light and extremely powerful. Weighing at only 56lbs, this new C-band 300W / 400W AntBUC® product family is the most powerful and feature rich for its size: up to 400W 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

- Up to 400W Psat
- Superior RF performance
- RF Overdrive Protection
- Available in various C-Band frequency options
- Field upgradable software
- Field replaceable power supply
- 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
- Status LED

RF PERFORMANCE (1/2)

RF Freq. Range-Available in/switched	5.85-6.425GHz (other frequency options available)	
IF Frequency Range	950-1525MHz	
LO Frequency	4.9 GHz	
Conversion	Single Conversion; non-inverting	
	300W	400W
Saturated Power	55dBm typ	56dBm typ
Linear power	52dBm min	53dBm 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	
Gain Control	20dB min dynamic range	
External Reference Frequency	10MHz multiplexed with IF In	
External Reference Required	-130dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -155dBc/Hz @ 100 kHz	
Phase Noise		
Up-Converter Phase Noise	-68dBc/Hz @ 100Hz; -80dBc/Hz @ 1kHz; -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz	

RF PERFORMANCE (2/2)

Linearity:	-25dBc at P linear
2 tone IMD Spectral Re-growth	-30dBc for QPSK at 1.5x symbol rate at Plinear+1dB
Noise Power Density:	
Transmit Band	-85dBm/Hz max
Receive Band	-150dBm/Hz max
Output Spurious:	
Non-signal related	-60dBc
Signal related	-55dBc

POWER

AC Voltage Range	90-265VAC 50-60Hz auto-ranging PFC	
	300W	400W
Power Consumption at rated power	1600W	1900W
Power Consumption at 3 dB back off	1200W	1600W

MECHANICAL

Size	17.7" x 13.3" x 10.1"
Weight	56lbs
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, Ethernet	MS3112E14-19S
Redundant Interface	MS3112E14-19P

PART NUMBERING INFORMATION

AC Power Supply	TPB-CB00550-HMSO TPB-CB00560-HMSO
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