



EUROSATCOM
VSATECH ASSOCIÉ

AntBUC® SERIES SUPER HIGH POWER DENSITY 600W / 800W / 1000W C-BAND GAN POWERED SSPA / BUC

Smaller, lighter and more Powerful AntBUC® Series World's Smallest and Lightest The Most Powerful and Linear GaN Powered C-Band SSPA / BUC 600W / 800W / 1000W available on the market today AntBUC® Series allows significant high power Solid State Power Amplifier / Block Up Converter 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 Powered by GaN Technology 600W / 800W / 1000W C-Band SSPAs / BUCs AntBUC® series are very compact, light and extremely powerful. Using patent pending Z-combining method and advanced GaN technology new IRT 600W / 800W / 1000W C-Band AntBUC® SSPA / SSPB / BUC has truly outstanding power density - up to 1000W PSAT in this super compact 22.6"x18"x10.7" package weighing only 110 lbs.

IRT 600W / 800W / 1000W C-Band AntBUC® BUC 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. 600W / 800W / 1000W C-Band AntBUC® BUC 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 1000W Psat
- Superior RF performance
- RF Overdrive Protection
- BUC or SSPA Optional
- Field upgradable software
- Internal / Autosense 10MHz Reference Optional
- Available in Standard and Full C-Band
- Switchable LO Option - Standard and Full C-Band in One Unit
- 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) Optional
- Redundant Ready - No External Redundancy Controller Required
- Status LED
- Antenna Mounting Kit Optional
- External Rackmount Remote M&C Panel Optional

RF PERFORMANCE

RF Freq. Range-Available in/switched	5.85-6.425GHz - 5.850-6.725GHz
IF Frequency Range	950-1525MHz - 950-1825MHz
LO Frequency	4.9 GHz
Conversion	Single Conversion; non-inverting
Saturated Power	
600W	58dBm / 600W typ.
800W	59dBm / 800W typ.
1000W	60dBm / 1000W typ.
Linear Power	
600W	+55dBm / +300W min.
800W	+56dBm / +400W min.
1000W	+57dBm / +500W 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	-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
Linearity:	-24dBc at P linear; -30dBc
2 tone IMD Spectral Re-growth	for QPSK at 1.5xsymbol rate at Plinear+1dB
Output Spurious:	
Non-signal related	-60dBc
Signal related	-55dBc

POWER

AC Voltage Range	190-265VAC 50-60Hz
	Auto-Ranging PFC
Power Consumption at rated power	
600W	3000W
800W	3500W
1000W	3750W
Power Consumption 3 dB back off	
600W	2700W
800W	3200W
1000W	3400W

MECHANICAL

Size	22.6" x 18" x 10.7"
Weight	110lbs
Cooling	Forced Air
Operating Temperature	-40 C to +55 C
Relative humidity	Up to 100% condensing



EUROSATCOM
VSATECH ASSOCIÉ

3 avenue du Canada, bât. Zeta, 91940 Les Ulis, France

+33 1 69 18 19 30

www.eurosatcom.eu

sales@eurosatcom.eu





EUROSATCOM
VSATECH ASSOCIÉ

AntBUC® SERIES SUPER HIGH POWER DENSITY 600W / 800W / 1000W C-BAND GAN POWERED SSPA / BUC

INTERFACES

IF Input Connector	N-type female
RF Output Connector	WR137 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

C -Band, AC Power Supply, Ext.
10MHz Ref.

600W	TPB-CB0580-HMS0
800W	TPB-CB0590-HMS0
100W	TPB-CB0600-HMS0



EUROSATCOM
VSATECH ASSOCIÉ

3 avenue du Canada, bât. Zeta, 91940 Les Ulis, France

+33 1 69 18 19 30

www.eurosatcom.eu

sales@eurosatcom.eu

