



Super High Power Density 150W-250W C Band BUC / SSPA

Smaller, lighter and more Powerful, the AntBUC[®] series allows significant high-power BUC / 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 SpacePath Communications offers 3 years warranty for this product line!

The 150W to 250W C-Band powered by GaN technology AntBUC[®] series are very compact, light and extremely powerful. Weighing only 12KG at 250W output power, this new C-band product family is the most powerful and feature rich for its size: up to 250W at saturated power.

This series 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. The 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.

Features

- Extremely High Power Density
 - Up to 250W Psat in 40 x 23 x 13 cms
- Superior RF performance
 - Superior Phase Noise: 8 dB better than IESS308/309 recommendation
 - Spurious emission below -60 dBc
 - Wide range Gain Control
 - o Highest Linearity at small back-off
- RF Overdrive Protection
- Built In Output Isolator provides full output VSWR Protection
- Redundancy ready with no external controller required
- Status LED

- Available in different frequency options
 - Super-extended 5.85-6.725GHz
 - Palapa 6.425-6.725GHz
 - o Insat 6.725-7.025GHz
- Extensive M&C capability
 - o Serial: RS 232 & RS 485
 - Ethernet: embedded Web browser (HTTP) & SNMPv3 support
- Input and output True RMS power detection
- Field upgradable software

Options

- Internal 10MHz Reference clock
- Automatic Level Control (ALC)
- Antenna Mounting Kit
- 1:1 and 1:2 Redundancy Kit
- Remote Control Panel

SpacePath Communications Ltd. Unit 4 Bartley Point, Osborn Way, Hook, Hampshire, RG27 9GX, United Kingdom Telephone: +44 (0)1256 760525 e-mail: sales@space-path.com Web: www.space-path.com © SpacePath Communications Limited 2024





RF Parameters						
Output Frequency Band, GHz		5	5.85-6.425GHz / 5.85-6.725GHz; other options available			
Input L Band Frequencies, MHz			950-1525MHz / 950-1825MHz			
Conversion Gain, dB			75 minimum, 77 typical			
Gain Flatness, dB			+/-1 typical +/-1.5 maximum over full band			
			+/-0.4 maximum over any 40MHz			
Gain Stability, dB			+/-1.5 maximum over full temperature range			
Gain Control, dB			20dB minimum dynamic range			
Linearity at Pout=Plin: 2 tone IMD			-25dBc max			
Spectral Regrowth		growth	-30dBc for QPSK at 1 x symbol rate			
Input Impedance, Ohm			50Ohm			
Input/Output VSWR			1.4:1 / 1.3:1			
Noise Power Density, dBm/Hz			-70 in Transmit Band,			
			-145 in Receive Band			
Spurious Emission dBc; Non-signal related / Signal related (at Plin)			-60 / -55 max			
AM/PM conversion at Plinear, º/dB			1.0 maximum			
Group Delay			Ripple 1 nsec p-p max over any 40MHz band			
BUC Parameters						
LO Frequency, MHz			4900MHz			
Type of Conversion			Single conversion, non-inverting			
External 10MHz			Over IF L Band cable with multiplexing			
Phase Noise, dBc/Hz			-70 @ 100Hz; -80 @ 1kHz; -90 @ 10kHz;			
			-95 @ 10	00kHz; -115 @ 1MH	Z	
Power						
AC Voltage Range			90-265V AC 50-60Hz auto-ranging; PFC			
Mechanical & En	vironmental					
Size			40 x 23 x 13 cms			
Weight			12KG (26lbs)			
Cooling			Forced Air			
<u> </u>	rature / Relative Hu	umidity	-40°C to +55°C	C / Up to 100% conc	lensing	
Interfaces						
IF Input Connector			N-type Female			
RF Output Connector			CPR137 Grooved			
AC Power In			3 pin MS style			
RS485 – Ethernet – SNMPv3			MS3112E14-19S			
SpacePath	Output Power	Prated	Plinear	P Cons at	P Cons at Plin	
Doub Manuals and	(W)	(dBm / W)		Prated		
Part Number		52 / 150	49 / 80	850W	700W	
STS150C	150W	021.00	· · · · · · · · · · · · · · · · · · ·			
	150W 200W	53 / 200	50 / 100	900W	720W	

SpacePath Communications Ltd. Unit 4 Bartley Point, Osborn Way, Hook, Hampshire, RG27 9GX, United Kingdom Telephone: +44 (0)1256 760525 e-mail: sales@space-path.com Web: www.space-path.com © SpacePath Communications Limited 2024

STS150/250_Ser Issue 2, June 2024