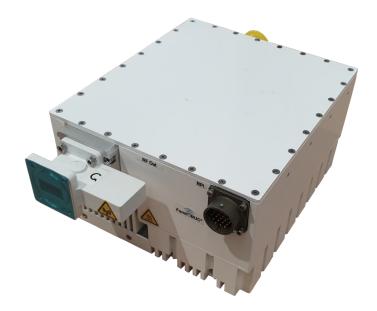


Spacepath STS 8_16_25W DBS Band BUC Data Sheet





The SpacePath Communications powered by GaN technology series are revolutionary in size, weight and power density. This series offers superior performance in an extremely compact package that can fit in your palm! Weighing at only 3.8KG, our feature-rich GaN SSPA is exceptionally powerful for its size: up to 25W PSAT. Built in power supply provides the customer with the simplest and least expensive plug-into-the wall solution. SpacePath Communications GaN series features best in class RF characteristics, extensive monitor and control capabilities enabled via Ethernet, Serial and/or Analog Interfaces. This series remarkably small size and low power consumption results in better heat extraction that leads to overall system size and cost reduction making it the ideal candidate for portable, mobile and VSAT on the move applications. Its small size and weight allows direct feed horn mounting, which makes it a most economical solution for fixed VSAT applications.

Options

- Available in RUGGEDIZED version—from –50 to +65 °C ambient temperature
- Internal / Autosense 10MHz reference
- True RMS detector
- Bluetooth M&C Interface
- Built in auto-ranging AC power supply
- Antenna Mounting Kit

Features

- Up to 25W Output Power in this super compact light weight package 16.5x19x10.5cms
- Only 220W power consumption at 25W output

- Superior RF performance
 - Phase noise 6dB better than IESS308/309
 - High Linearity
 - Wide Dynamic range of Gain Control
- Configuration via packet protocol RS-485—User Friendly HTTP based GUI and SNMP optional
- Redundant ready with no external controller required
- Status LED
- Field Upgradable software
- 48VDC isolated power supply
- 8-25W Power level available in GaN versions
- SSPA or BUC versions available



8W - 25W L to DBS-Band Block-Up-Converter Specification

Parameter						
RF Performance	9					
RF Frequency Ranges-Available in/switched		17.3-18.1GHz 17.3-18.4GHz				
IF Frequency Rage		950-1750MHz 950-2050MHz				
LO Frequency		16.35GHz Single Conversion; non-inverting				
Conversion Gain		72dB min, 75dB typ.				
Gain Flatness		+/-1dB typ +/-1.5dB max over full band; +/-0.5dB max over any 40MHz				
Gain Stability		+/-1.5dB over full temperature range				
Gain Control		20dB min dynamic range with 0.1dB step				
External Reference Frequency		10MHz multiplexed with IF In				
External Reference Required Phase Noise		-130dBc/Hz @ 100Hz -140dBc/Hz @ 1kHz -150dBc/Hz @ 10kHz -155dBc/Hz @ 100kHz				
Up-Converter Phase Noise		-70dBc/Hz @ 100Hz -80dBc/Hz @ 1kHz -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz				
Linearity:	2 tone IMD Spectral Re-growth	-24dBc at Plinear -30dBc for QPSK at 1.5 x symbol rate at Plinear				
Noise Power Density:	Transmit Band Receive Band	-85dBm/Hz max -140dBm/Hz max				
Output Spurious:	Non-signal related Signal related	-60dBc -55dBc				
Power						
48VDC Voltage Range / 28VDC Voltage Range (Optional)		36-72VDC Isolated 24-75VDC Isolated				
AC Voltage Range (Optional)		90-265VAC 50-60Hz Auto-Ranging				
Mechanical						
Size		16.5x19x10.5cms				
Weight		3.8KG				
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		WR62 grooved				
Power In		MS3112E12-3P				
RS485-RS232-Ethernet-SNMP		MS3112E14-19S				

SpacePath	Output Power	Psat	P1dB	Plinear	P Cons at	P Cons at	GaN
Part Number	(W)	(dBm)	(dBm/W)	(dBm/W)	Prated	Plin	
STS8DB	8W	39	N/A	36/4	90W	75W	GaN
STS16DB	16W	42	N/A	39/8	135W	110W	GaN
STS25DB	25W	44	N/A	41/12	220W	190W	GaN