



Super High Power Density 800W-1000W C Band BUC / SSPA

Smaller, lighter and more Powerful, the KiloBUC® 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 800W to 1000W C-Band KiloBUC® series are compact, lightweight and extremely powerful. Weighing 60KG at 1000W output power, this new C-band product family is the most powerful and feature rich for its size.

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.

Features

- Extremely High Power Density
 - Up to 1000W Psat in 61 x 51 x 32 cms
- Superior RF performance
 - Superior Phase Noise: 8 dB better than IESS308/309 recommendation
 - Spurious emission below -60 dBc
 - Wide range Gain Control
 - Highest Linearity at small back-off
- RF Overdrive Protection
- Redundancy ready with no external controller required
- Status LED
- Analogue Interface
- Available in GaAs configuration

- Available in different frequency options
 - Super-extended 5.85-6.725GHz
 - Palapa 6.425-6.725GHz
 - Insat 6.725-7.025GHz
- Extensive M&C capability
 - 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

RF Parameters					
Output Frequency Band, GHz	5.85-6.425GHz (other options available)				
Input L Band Frequencies, MHz	950-1525MHz				
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 Spectral Regrowth	-25dBc max -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	-68 in Transmit Band, -140 in Receive Band				
Spurious Emission dBc; Non-signal related / Signal related (at Plin)	-60 / -55 max				
AM/PM conversion at Plinear, °/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 @ 100kHz; -115 @ 1MHz				
Power					
AC Voltage Range	190-265V AC 50-60Hz PFC				
Mechanical & Environmental					
Size	61 x 51 x 32 cms				
Weight	60KG (132lbs)				
Cooling	Forced Air				
Operating Temperature / Relative Humidity	-40°C to +55°C / Up to 100% condensing				
Interfaces					
IF Input Connector	N-type Female				
RF Output Connector	CPR137 Grooved				
RF Sample	N-type Female				
AC Power In	3 pin MS style				
RS485 – Ethernet – SNMPv3	MS3112E14-19S				
SpacePath Part Number	Output Power (W)	Prated (dBm / W)	Plinear (dBm / W)	P Cons at Prated	P Cons at Plin
STS800C (GaN)	800W	59 / 800	56 / 400	3300W	3000W
STS1000C (GaN)	1000W	60 / 1000	57 / 500	3500W	3300W
STS1000C (GaAs)	1000W	60 / 1000	57 / 500	3300W	2400W

Specifications are subject to change without notice