



The SpacePath Communications 1800W C-Band Rack Mount SSPA/SSPB is Smaller, lighter and more powerful. This 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 offers 3 years warranty for this product line!

The new SpacePath Communications powered by GaN technology 1800W BUC/SSPA Series are very compact, light and extremely powerful. Using patent pending Z-combining method and advanced GaN technology this series has truly outstanding power density up to 1800W C-Band Psat in 10RU light compact package.

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. Redundant truly hot swappable power supply gives even higher overall reliability.

Options

- Internal 10MHz reference (BUC)
- 10MHz reference auxiliary output option (BUC)
- Input and Output RF Sample port
- Automatic Level Control (ALC)

Features

- Extremely high power density - up to 1800W C-Band PSAT in 19" rackmount, 10RU only!
- Superior RF performance:
 - Phase noise 5-8dB better than IESS308/309
 - High Linearity
 - PSAT up to 62.5dBm
 - Wide dynamic range of Gain Control

- RF Overdrive Protection
- Redundant Hot Swappable Power Supply
- Configuration via RS-232 serial console, packet protocol RS-485 - User friendly HTTP based GUI and SNMP
- User friendly Front Panel with Menu Driven Display
- Redundant Ready - No External Redundancy Controller Required
- Built-in Power Metering
- Full VSWR protection

STSR 1800W C-Band Rack Mount SSPA/BUC Specification

Parameter	Std. C-Band	Ext. C-Band		
RF Performance				
RF Frequency Range-Available:	5.850-6.425GHz	5.850-6.725GHz		
IF Frequency Range (BUC)	950-1525MHz	950-1825MHz		
LO Frequency C	4.9GHz; Single Conversion; non-inverting			
Saturated Power	62.5dBm/1800W typ			
Linear power	59.5dBm min			
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	+/-1.0dB over full temperature range			
Gain Control	20dB min dynamic range			
Up-Converter Phase Noise	-68dBc/Hz @ 100Hz; -80dBc/Hz @ 1kHz; -90dBc/Hz @ 10kHz -95dBc/Hz @ 100kHz -115dBc/Hz @ 1MHz			
Linearity: 2 tone IMD Spectral Re-growth	-24dBc at P linear -30dBc for QPSK at 1.5xsymbol rate at P linear			
Output Spurious: Non-signal related	-65dBc			
Signal related	-60dBc			
Power				
AC Voltage Range	190-265VAC 50-60Hz Auto-Ranging PFC			
Mechanical				
Size	10RU			
Weight	89KG			
Environmental				
Cooling	Forced Air			
Operating temperature	0°C to +50°C			
Relative Humidity	Up to 99% non-condensing			
Interfaces				
IF Input Connector	N-type female rear panel			
RF Output Connector	CPR137 grooved rear panel			
RF Sample	N-type female front panel			
AC Power In	NEMA Connector rear panel			
M&C Interface-Serial, Analog and Ethernet	DSUB Connectors, RJ45 rear panel			
SpacePath Part Number				
Prated(dBm/W)	Plinear (dBm/W)	P Cons at Prated	P Cons at Plin	
STS1800CC1*-OPTxx**	62.5/1800	59.5/900	7500W	6800W

* Use CC2 for Ext. C-Band

Specifications are subject to change without notice

** xx To be replace by 2 digit code based on configuration