

# Rack Mount 1800W C-Band SSPA / SSPB

The 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.

Powered by GaN technology, the 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:
  - o Phase noise 5-8dB better than IESS308/309
  - o High Linearity
  - o PSAT up to 62.5 dBm
  - o Wide dynamic range of Gain Control
    - RF Overdrive Protection
    - Field upgradable software
    - 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



RF Parameters		
	Std. C-Band	Ext. C-Band
RF Frequency Range	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	-24dBc at P linear
	Spectral Re-growth	-30dBc for QPSK at 1.5 x symbol rate at Plinear
Output Spurious:	Non-signal related	-65dBc
	Signal related	-60dBc

Power & Mechanical	
AC Voltage Range	190-265VAC 50-60Hz Auto-Ranging PFC
Size	10RU
Weight	89KG
Cooling	Forced Air
Operating Temperature / Relative Humidity	0°C to +50°C / 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, Ethernet	DSUB Connectors. RJ45 rear panel

Part Number	Prated (dBm / W)	Plinear (dBm / W)	P Cons at Prated	P Cons at Plin
IPB-CB00625-RMSX	62.5 / 1800	59.5 / 900	7500W	6800W

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.

Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.