



The SpacePath Communications Indoor rack-mount C-Band SSPA Series are revolutionary in size, weight and power efficiency. This series offers superior performance only 2RU size! The Indoor 19" rack-mount series gives Satcom operators more options, and is easily installed in a 19" standard rack.

### Options


- Output RF Sample Port
- Output power measurements - True RMS detector

### Features

- Up to 10W PSAT Output Power in 19" Rack-mount 2RU only!
- Only 130W Power consumption at 10W output

- Superior RF performance:
  - High Linearity
  - Spurious below -60dBc
  - Wide dynamic range of Gain Control
- Built in WG Circulator provides full output VSWR Protection
- Configuration packet protocol RS-485 - User friendly HTTP based GUI and SNMP
- Built in Auto-Ranging AC power supply
- Field Replaceable power supply

## 10W C-Band SSPA Specification

| Parameter                        |                                      |  |
|----------------------------------|--------------------------------------|--|
| <b>RF Performance</b>            |                                      |  |
| RF Frequency Range               |                                      | 5.85-6.425GHz (other frequency options available)  |
| Input Frequency Range            |                                      | 5.85-6.425GHz (other frequency options available)  |
| Gain                             |                                      | 67dB min, 70dB typ   |
| Group Delay                      |                                      | Linear: $\pm 0.03\text{ns/MHz}$<br>Parabolic: $\pm 0.003\text{ns/MHz}^2$ max<br>Ripple: 1.0ns peak to peak max |
| Gain Flatness                    |                                      | $\pm 1\text{dB}$ typ $\pm 1.5\text{dB}$ max over full band;<br>$\pm 0.4\text{dB}$ max over any 40MHz           |
| Gain Stability                   |                                      | $\pm 1.5\text{dB}$ over full temperature range; $\square \pm 0.25\text{dB}$ , 24 hours at constant temperature |
| Output Power at P1dB             |                                      | 40dBm min (10W min)  |
| Output Power at Psat             |                                      | 41dBm typ (12W typ)  |
| Linear Output Power P1in         |                                      | 37dBm min (5W min)   |
| Gain Control                     |                                      | 20dB min dynamic range with 0.1dB step   |
| AM/PM Conversion                 |                                      | 1deg max up to 20W   |
| Input Return Loss                |                                      | -16dB max  |
| Output Return Loss               |                                      | -18dB max (for WR137 output)   |
| Linearity:                       | 2 tone IMD<br>Spectral Re-growth     | -25dBc at P1in<br>-30dBc for QPSK at 1.5x symbol rate at P1linear+1dB  |
| Noise Power Density:             | Transmit Band<br>Receive Band        | -85dBm/Hz max<br>-140dBm/Hz max  |
| Output Spurious:                 | Non-signal related<br>Signal related | -60dBc<br>-55dBc   |
| Harmonic Output                  |                                      | $\leq -55\text{dBc}$ (at P1in)   |
| <b>Power</b>                     |                                      |  |
| AC Voltage Range                 |                                      | 90-265VAC 50-60Hz auto-ranging   |
| Power Consumption                |                                      | 130W typ   |
| <b>Mechanical</b>                |                                      |  |
| Size                             |                                      | 2 RU 19" Chassis   |
| Weight                           |                                      | 7.5lbs   |
| Cooling                          |                                      | Forced Air   |
| Operating temperature            |                                      | 0°C to +60°C   |
| Storage temperature              |                                      | -40 to +85 deg. C  |
| <b>Interfaces and Indicators</b> |                                      |  |
| RF Input Connector               |                                      | Precision N-; female   |
| RF Sample Connector              |                                      | Precision N-; female   |
| RF Output Connector              |                                      | CPR137 grooved   |
| RS485-RS232                      |                                      | DB9 Connector rear panel   |
| Ethernet-SNMP                    |                                      | RJ45 rear panel  |
| <b>Standards</b>                 |                                      |  |
| CE Status                        |                                      |  Certified                 |