

# SPAC-20-1-OT

Single Band Power Amplifier, C-Band, 20W



Rev A

## Product Overview

The SPAC-20-1-OT provides 20W of linear output power in C-band. The RS-485 digital control interface allows for dynamic configuration in operation, as well as output power control.

The SPA maximizes versatility by supporting power efficient transmit power for FSK, CPM, and similar waveforms as well as linear operation for bandwidth efficient transmission of QPSK, QAM, and similar signals without detrimental spectral regrowth. Its optimized design provides minimum size, weight

and power consumption enabling deployment in virtually all platforms. The power amplifier covers both low and high C bands in a single, compact, lightweight, environmentally

sealed package. The SPA series is VORTEX® and ROVER® compatible and has been deployed on numerous platforms and qualified on multiple programs. The SPA comes with a standard 1-year warranty.



## Technical Specifications

### General

<b>Operating Frequency</b>	4.4 – 5.0 GHz 5.25 – 5.85 GHz
<b>Tx P<sub>SAT</sub></b>	30 W typ
<b>Tx P<sub>LINEAR</sub></b>	20 W min
<b>Tx RF In Input Level</b>	+15 dBm (no damage) -5 dBm to +10 dBm
<b>Output Protection</b>	Survives operation into infinite VSWR
<b>Spurious and Harmonics</b>	IAW MIL-STD-461F
<b>Input/Output VSWR</b>	2.0:1 max
<b>DC Power</b>	+24 V-32 V, 28 V nom
<b>Power Draw</b>	175 W max

*Power supply is reverse polarity protected*

### Physical

<b>Dimensions</b>	4" x 6" x 1"
<b>Weight</b>	2.5 lbs. max

### Connectors

<b>RF Input/Output</b>	TNC Female
<b>DC Power</b>	Fischer 102
<b>Command/Status</b>	Fischer 1031

### Environmental

<b>Operational Alt</b>	70 kft
<b>Operating Temp</b>	-20°C to +85°C <sup>1</sup>
<b>Shock and Vibration</b>	IAW MIL-STD-810G/DO160G
<b>Rain/Sand/Salt Fog</b>	IAW MIL-STD-810G/DO160G

<sup>1</sup>Above 70°C the amplifier may perform with degraded performance but will not shut down until 85°C.

### Install Instructions

The amplifier must be mounted to a heatsink capable of dissipating 100 W of heat.

Compatible with CK-052 – CK-055.