

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

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

Power supply is reverse polarity protected

Physical

Dimensions	4" x 6" x 1"
Weight	2.5 lbs. max

Connectors

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

Environmental

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

¹Above 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.