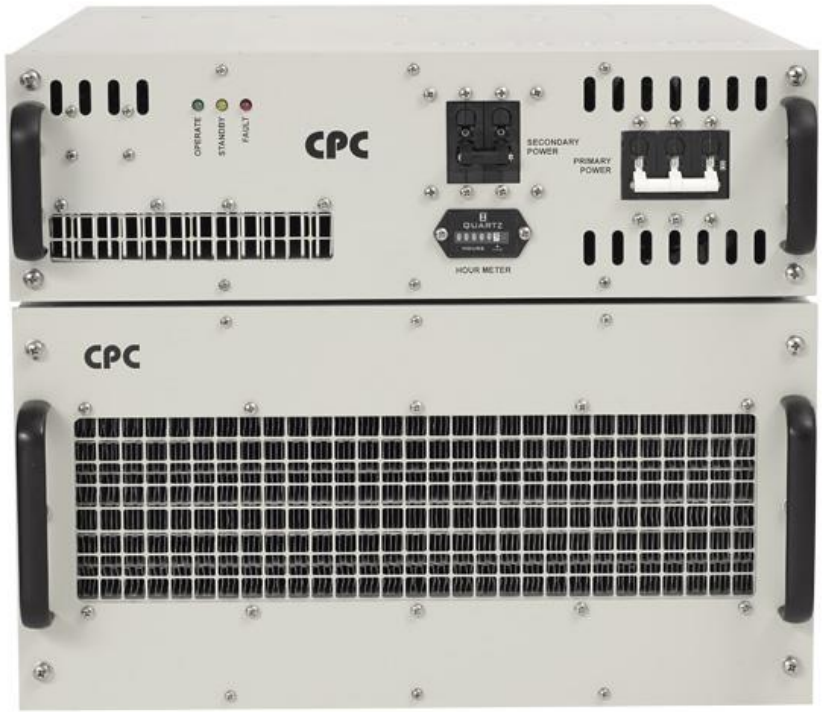
# CPC RF Power Amplifiers: Avionics/COMMJAMM/EW




Avionics Grade RF Power Amplifier

Model #: AR-1.5-30-5E2
1.5-30 MHz, 500W CW

**Product Overview**: CPCs Model # AR-1.5-30-5E2 is an Avionics Grade, 500W RF Power Amplifier designed specifically for Airborne Communications Jamming and Electronic Warfare. The core RF power section is Class AB and provides exceptional performance with AM, FM, PM, Digital and Pulse Modulation Formats. The system reliability is enhanced in the design phase with Highly Accelerated Life Testing (HALT) and amplifier production sub-assemblies are 100% sampled with Highly Accelerated Stress Screen (HASS) testing.

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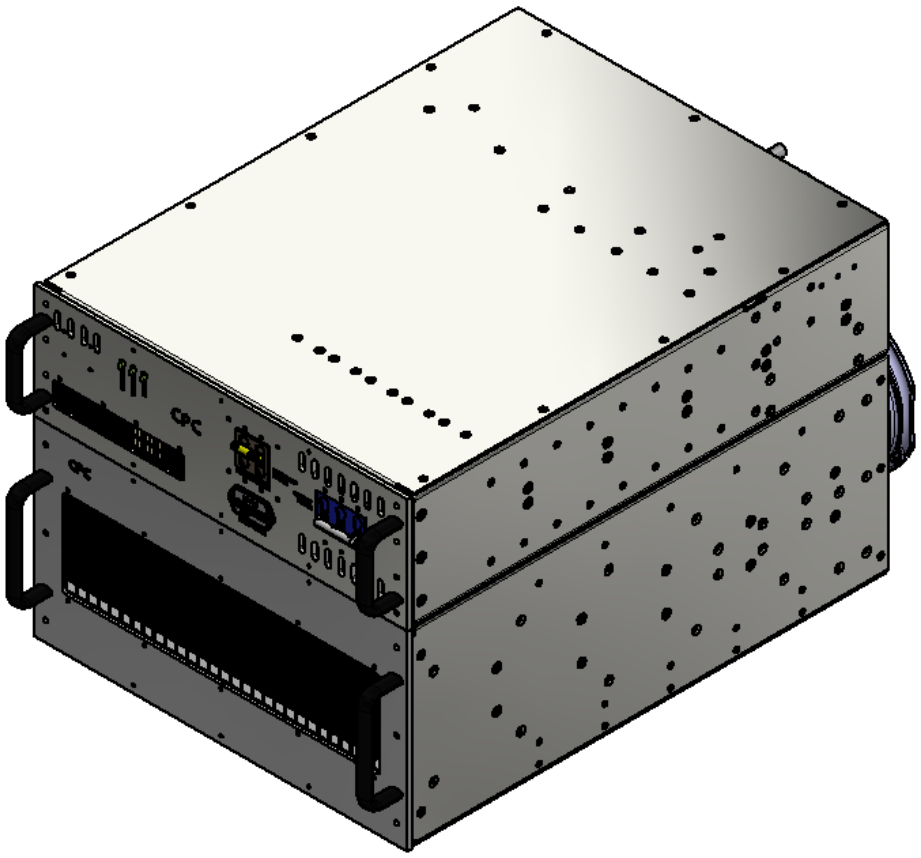
**MODEL #: AR-1.5-30-5E2**
**1.5-30 MHZ, 500W CW**

## RF/ELECTRICAL SPECIFICATIONS

- Frequency Range: 1.5-30MHz
- Power Output: 500W CW
- Gain: +57 dB nominal
- Gain Flatness: +/- 2dB
- Gain vs temperature: +/-1dB over operating temperature range
- Gain Linearity: +/- 1dB over 20dB
- Gain adjustment: +/-5dB
- Noise Figure: 10dB at maximum gain
- Input VSWR: <2.0:1
- Input Overdrive: up to +10dBm
- Harmonics: 2nd: <-20dBc, 3rd: <-12dBc

- Spurious output: <-60 dBc
- Load VSWR: 3:1 all phases
- Interface: RS 422
- DC Input Voltage: +28 VDC nominal, +24 VDC (Minimum), +32VDC (Maximum)

## Mechanical Specifications/Dimensions



- Height: 8RU, 13.91" (35.33CM)
- Depth: 25.86" (65.68 CM) (Rack handle to rear fan housing)
- Width: 17.01" (43.2CM) (19" rack mounting available)
- Weight: 150 lbs. (68.04kg)

- Connectors:
  - RF Input: Type N(F)
  - RF Output: Type SC(F)
  - Interface: D sub (9pin, male)
  - DC input: 8W8P
  - Chassis ground (0.25" stud)
- Cooling: Forced Air (Front Air Intake, Rear Exhaust)

## Environmental Specifications

- Temperature (Operating): 0 to +50 Degrees C, Pressurized Aircraft Cabin
- Temperature (Non-Operating): -20 to + 70 Degrees C
- Relative Humidity: 90% non-condensing
- Altitude: Aircraft Pressurized Cabin to 10,000 ft. (AMSL)
- Shock/Vibration: Mil-Std-810F to 15G