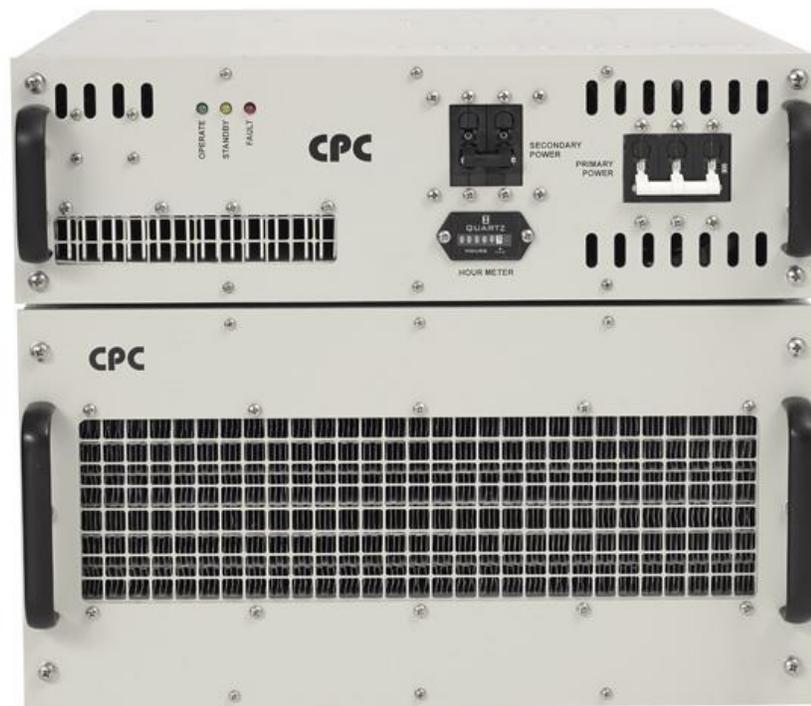




CPC RF Power Amplifiers www.cpcamps.com

CPC RF Power Amplifiers: Avionics/COMMJAMM/EW



Avionics Grade
RF Power
Amplifier

Model #: AR-20-100-1E3
20-100 MHz, 1kW CW

Product Overview: CPCs Model # AR-20-100-1E3 is an Avionics Grade, 1kW 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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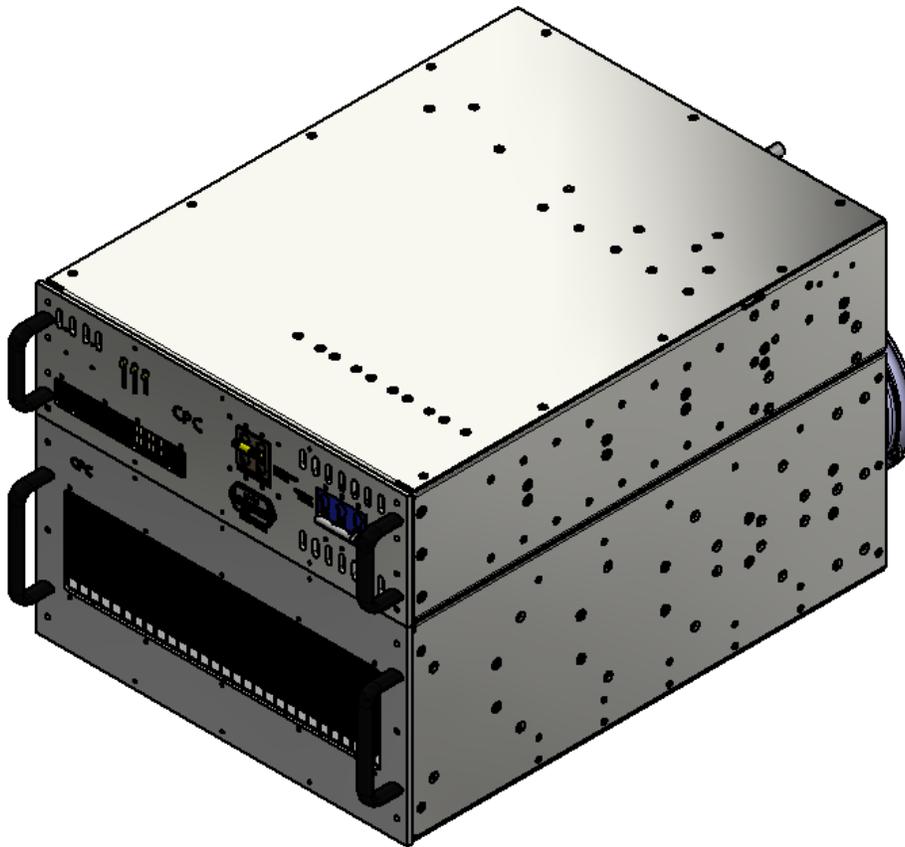
MODEL #: AR-20-100-1E3
20-100 MHZ, 1KW CW

RF/ELECTRICAL SPECIFICATIONS

- Frequency Range: 20-100MHz
- Power Output: 1kW CW
- Gain: +60 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