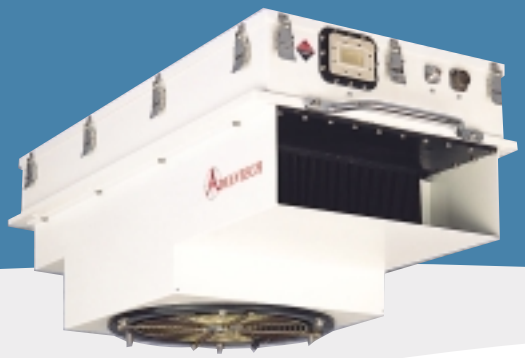
hubmount SSPA
200 W to 400 W C-BAND



C-BAND HUBMOUNT SSPA with basic control

High Power
200 W to 400 W

AWSA-C200; AWSA-C250; AWSA-C300; AWSA-C350; AWSA-C400

INTRODUCTION

The AWSA-C series described in this section are for Advantech's line of high power solid state power amplifiers (SSPAs) with basic control and output power ranging from 200 watts to 400 watts. Other C-band hubmount SSPAs are available for output powers from 5 watts to 3200 watts.

Advantech's hubmount SSPAs are designed for outdoor operation in hard environmental conditions and are particularly suited to flyaway or mobile applications as SNG, where efficiency and size considerations are critical. Advantech's hubmount SSPAs set the industry standard for operating efficiency and feature compact and lightweight construction.

STANDARD FEATURES

- High gain, linearity and efficiency
- Gain control (local)
- Remote RF mute capability
- Temperature gain compensation
- Automatic over-temperature shutdown
- Automatic high reflected power shutdown
- Output sample monitor ports
- Form-C contacts for fault/alarm conditions
- Infinite VSWR protection
- CE Marking

OPTIONS

- Extreme temperature operation
- Power factor correction

Advanced Microwave Technologies, Inc.
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200 W to 400 W C-BAND

TECHNICAL SPECIFICATIONS			200 W	250 W	300 W	400 W
Electrical Characteristics						
Frequency ranges			4.400 - 5.000 GHz (CL series); 5.025 - 5.250 GHz (CG series); 5.725 - 6.025 GHz (CR series); 5.700 - 6.725 GHz (CC series) 5.850 - 6.425 GHz (CS series); 5.850 - 6.725 GHz (CX series); 6.425 - 6.725 GHz (CP series); 6.725 - 7.025 GHz (CI series)			
Saturated output power nominal			+53 dBm	+54 dBm	+55 dBm	+56 dBm
Output power (P1dB)			+52 dBm	+53 dBm	+54 dBm	+55 dBm
Gain minimum (G_{max} = G_{min} + 5 dB)			62 dB	63 dB	64 dB	65 dB
Gain flatness over 600 MHz			±1 dB max.			
Gain slope			0.6 dB/40 MHz max.			
Gain variation			±1.5 dB over operating temperature range			
Gain adjustment range			20 dB min.			
Input VSWR			1.3:1 max.			
Output VSWR			1.25:1 max.			
Noise Figure			8 dB at max. gain			
Spurious at rated power			-65 dBc, max.			
Harmonics at rated power			-90 dBc, max			
AM/PM conversion at rated power			2.5°/dB max. at P1dB, 1°/dB max. at 3 dB back-off			
Two tone intermodulation (5 MHz apart)			-36 dBc min. at 7 dB total back-off from rated P1dB, -26 dBc min. at 3 dB total back-off from rated P1dB			
Group Delay			Linear: 0.02 dB/MHz max. Parabolic: 0.003 dB/MHz^2 max. Ripple 1 nsec p-p max.			
Phase Noise			meets IESS-308/309			
Residual AM (F* - frequency in kHz)			0-10 kHz 10 kHz - 500 kHz 500 kHz - 1 MHz	-45 dBc -20 (1+log F*) dBc -80 dBc		
Power Requirements						
Operating voltage			220 VAC (47 - 63 Hz)			
Power consumption, nominal			1400 W	1750 W	2100 W	2800 W
Mechanical Characteristics						
Dimensions (W x H x L)			16" x 13.5" x 31" (200 W/250 W); 20" x 15" x 35" (300 W/400 W)			
Weight			50 kg (110 lbs) – 200 W/250 W; 60 kg (132 lbs) – 300 W/400 W			
Interfaces	RF input		Type-N female			
	Output sample port		Type-N female			
	RF output		CPR 137 contact (grooved)			
	Discrete port		MS3112E16-26P			
	Power		MS3102E20-19P			
Environmental Conditions						
Temperature		Operating	-30°C to +50°C option 2: -40°C to +50°C; option 3: -55°C to +50°C			
		Storage	-55°C to +85°C			
Humidity			100% condensing, up to 2"/hour rain			
Altitude			10,000' AMSL, derated by 2°C/1000' from AMSL			

All other specifications are guaranteed over full specified temperature range

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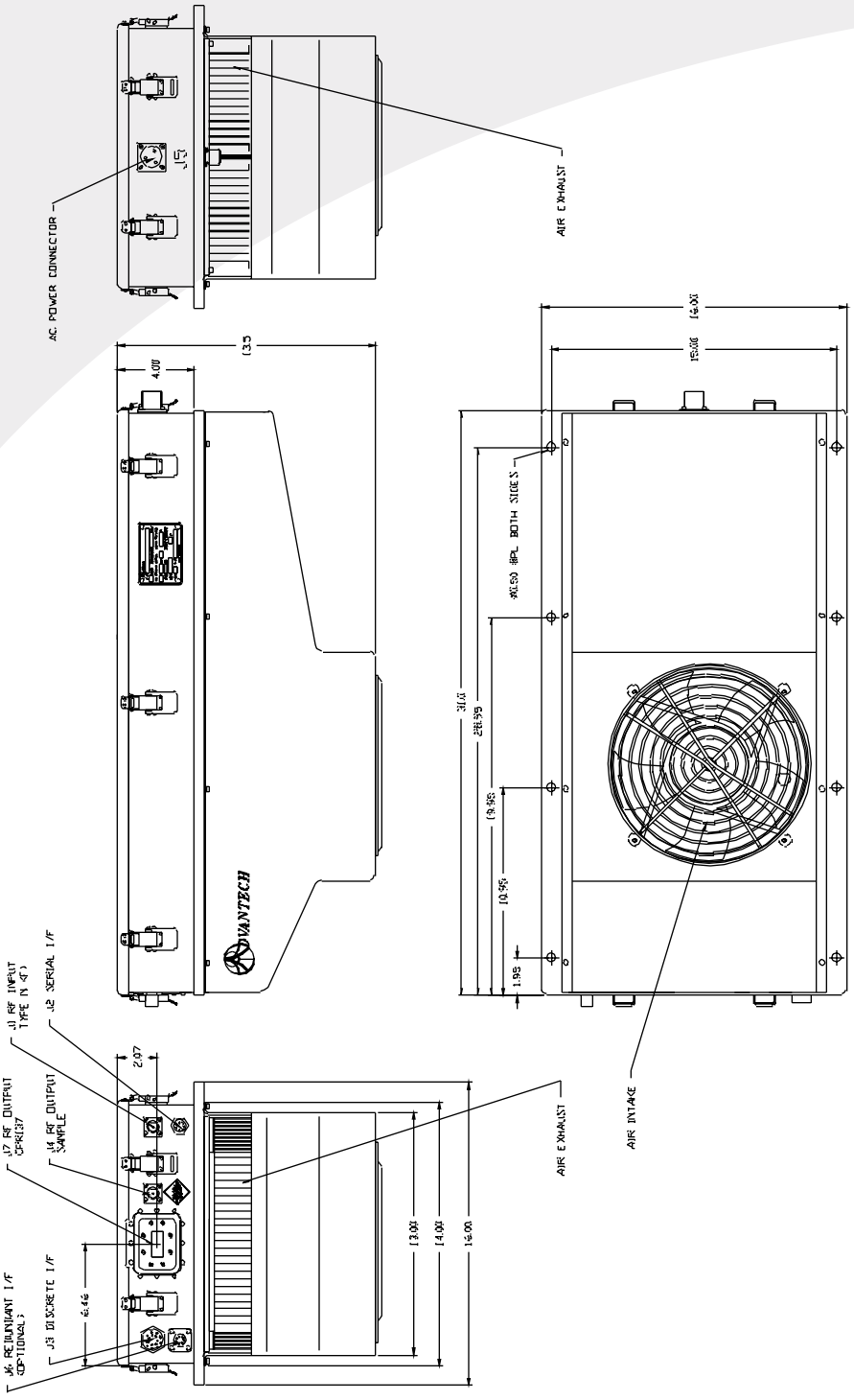

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