

80W - 250W Rack Mount LDMOS S-Band SSPA

The ARMA-2000STM series are the rack-mount solid-state power amplifiers (SSPAs), operating in S-Band frequency range. The amplifier is an integrated unit, complete with power supply and cooling system. Intended for indoor operation, the amplifiers are of compact size and occupy four rack-mounting spaces (4 RU - 7") of a standard 19-inch rack. Built-in microprocessor controller provides capability for serial port interfaces (RS485) for remote monitoring and control.

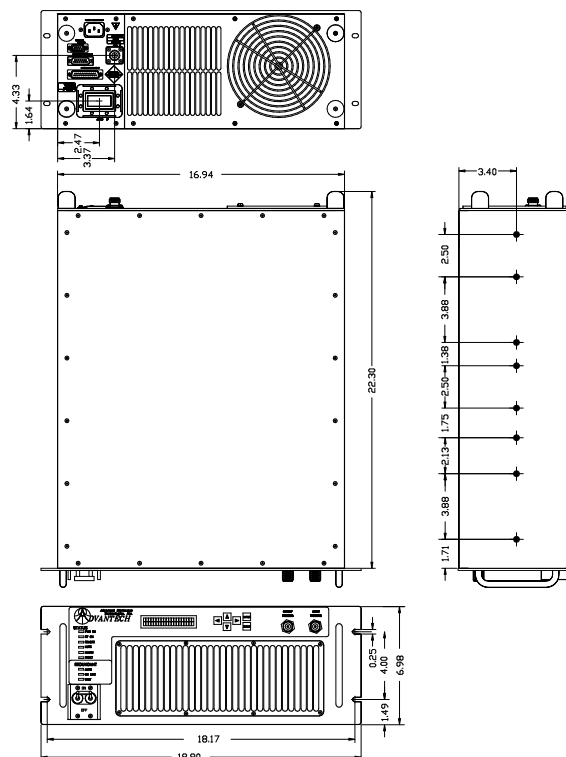
Advantech's SSPAs set the industry standard for linearity and operating efficiency. Built-in design features and assembly methods incorporated with efficient combining techniques result in the trouble-free operation of the amplifier.



SSPA - ARMA-S
ARMA-2000STM series

Features and Options

- High gain and linearity
- Output power up to 250W
- Gain adjustment (Local & Remote)
- Remote Monitor & Control (Local & Remote)
- Output sample monitor port
- Temperature gain compensation
- Automatic over-temperature shutdown
- Automatic high reflected power shutdown
- Ethernet SNMP with Web Server
- Infinite VSWR protection
- Power factor correction
- CE Marking



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Technical Specifications		80W	100W	125W	150W	200W	250W
Electrical Characteristics							
Output power (P _{SAT})		+49 dBm	+50 dBm	+51 dBm	+52 dBm	+53 dBm	+54 dBm
Output power (P1dB) min		+48 dBm	+49 dBm	+50 dBm	+51 dBm	+52 dBm	+53 dBm
Power Gain @ max setting		65 dB min					
Frequency range		2.025 GHz - 2.120 GHz					
Gain adjustment range		20 dB					
Gain flatness		1.5 dB p-p max over full band 0.5 dB p-p over 10 MHz at 25°C					
Gain slope		0.05 dB/20 MHz max.					
Gain variation over temperature		± 2 dB over full operating range (temperature compensation mode)					
Gain variation over 24 hours		±0.25 dB max at constant temperature & drive level					
Input VSWR		1.3:1					
Output VSWR		1.4:1					
Noise Power Density		- 80 dBm/Hz max in TX band - 85 dBm/Hz max in RX band (without optional filter)					
Spurious at rated power		-65 dBc, max.					
Harmonics at rated power		-60 dBc, max					
AM/PM conversion at rated power		2.5°/dB max. at P1dB, 1°/dB max. at 3 dB back-off from rated P1dB					
Third order IMD (two equal tones 5 MHz apart)		-26 dBc max. at 3 dB total back-off from rated P1dB					
Group Delay		Linear: 0.01 nsec/MHz max. Parabolic: 0.002 nsec/MHz ² max. Ripple: 0.5 nsec p-p max.					
Residual AM (F* - frequency in kHz)		0-10 kHz -45 dBc 10 kHz - 500 kHz -20 (1.25+log F*) dBc 500 kHz - 1 MHz - 80 dBc					
Power Requirements							
AC input voltage		90-264 VAC auto ranging (47-63 Hz)					
Power consumption (nom.) (W)		300	400	500	600	800	1000
Mechanical Characteristics							
Panel Height		4 RU of 19" rack					
Weight		30 kg (66 lbs)					
Interfaces:		RF input	N-Type (F)	Redundancy	D-sub 25S	Discrete port	D-sub 9S
		RF output	N-Type (F)	RS-232	D-sub 9S	AC Line	IEC 320 inlet
		Output sample port	N-Type (F)	RS-485	D-sub 9S		
Environmental Conditions							
Temperature:	Operating	0°C to +50°C					
	Storage	-55°C to +85°C					
Humidity		5%-95%, non-condensing					
Altitude		10,000' AMSL, de-rated 2°C/1,000' from AMSL					

Note: specifications subject to change without notice

Ref.: PB ARMA S-Band 80W-250W-25217

info@advantechwireless.com

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