



modular rf

AR-5000 SERIES
Up to 1000 WATTS CW
Up to 4000 WATTS PEP
From 80 kHz to 1 GHz

AR Modular RF's **AR-5000 Series** is the next generation of wideband, Class A/AB linear amplifier designed for use with modern digital modulations. Engineered with a flexible system architecture, **AR-5000 Series** amplifiers are tailored to meet specific user needs over the frequency range of 80 kHz to 1000 MHz and power range of up to 1000 Watts CW and 4000 Watts peak.

Key Features:

- Touch Screen Control Interface
- Ethernet Remote Control
- Lightweight 19", 2U/3U Chassis
- Rack Mount Enclosure
- AC Powered, Single Phase
- RF Gain Control
- Input Overdrive Protection
- Output VSWR Protection
- Over Temperature Protection
- Unconditionally Stable
- Forward & Reflected Power Monitoring
- Blanking



The following specifications highlight typical performance parameters that can be specified for a custom design. For ordering, contact AR Modular RF Sales for detailed information.

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SAMPLE PERFORMANCE SPECIFICATIONS – AR-5000 SERIES AMPLIFIER

ELECTRICAL

SPECIFICATION	Units	Minimum	Typical	Maximum	Notes
Amplifier Class	-	A, A/B			
Frequency Response	MHz				
Maximum Output Power	W				
Power Gain	dB				
Input Power	dBm				
Gain Control Range	dB				
Blanking	µs				
Gain Flatness	dB				
Noise Figure	dB				
Input / Output Impedance	Ohm		50		
VSWR Tolerance	-			3:1	
	-			Infinite	
Spurious Outputs	dBc				
Harmonic Performance	dBc				
OIP3	dBm				
Input Power (AC)	VAC	100		240	
	Hz	50		60	
Power Consumption	kW				

MECHANICAL & ENVIRONMENTAL

SPECIFICATION	Units	Details	Notes
Size	Inches	19.0" W x TBD L x 3.5" H	Standard 19" Rack Mount, 2U
Weight	kg	20	
Operating Temperature, Ambient	°C	+5 to +40	
Relative Humidity	%	95	Maximum, non-condensing
Cooling	-		Forced Air (Integrated Fans, Automatically Controlled)

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INTERFACE & CONTROL

The AR-5000 has interface and control elements on both the front and rear panels. The amplifier is fully operational using the front-panel interface and can be optionally controlled via a rear-panel Ethernet connection.

Element	Panel	Details	Notes
Ethernet	Rear	RJ45	Ethernet control for remote operation. All amplifier control and monitoring can be performed remotely via Ethernet
RS-232	Rear	DB9	(contact AR Modular if this interface is required)
RF Input	Rear	N-Type, Female	
RF Output	Rear	N-Type, Female	
Remote Interlock / Blanking	Rear	BNC, Female	Used as a discrete, fast on/off switch
AC Power Connector	Rear	IEC Appliance Inlet C20	Shipped with unterminated mating cable
AC Power Control	Rear	Toggle switch	Hard power control
	Front	Push button	Soft power control
Status LEDs	Front	Various indicators	AC present, Amplifier ON/OFF, general fault
Touch Screen	Front	Menu based local interface for amplifier operation	Touch screen - Access to forward/reflected power performance, status monitoring, amplifier remote configuration, etc.

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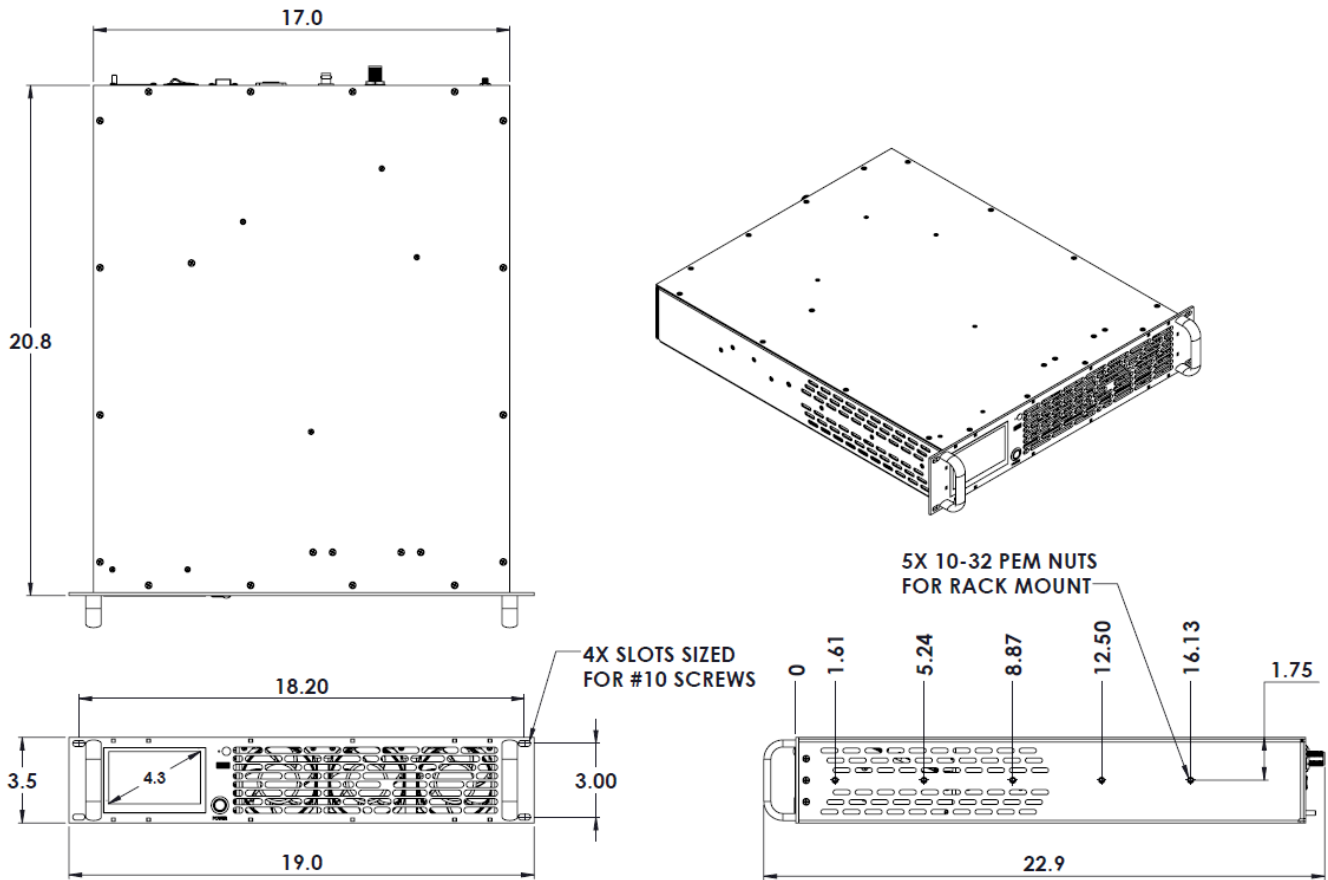


Figure 1 – OUTLINE DRAWING - FOR REFERENCE ONLY

CUSTOM

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