

NEW!



Precision Industrial AC/DC Amplifier

PERFORMANCE OVERVIEW

AC Power (up to 20 kHz):	400 watts RMS
Small Signal (8V p-p):	500 kHz
For High-Power Applications to:	50 kHz
DC Power:	15A at 13.5 VDC
40 ms Pulse (0.5Ω)	25 Ap
Slew Rate:	>40 V/μs
Output Voltage:	±90 Vp or ±45 Vp
Output Impedance:	10 mΩ in series with 0.95 μH

FEATURES

- 15A DC and capable of reproducing 150 kHz ripple or $4\mu\text{s}$ dropout/pulses.
- User-variable DC offset: 0 - ±20V or 0 - ±45V.
- User-adjustable current limit: 25A to 1A.
- Compact 1/2-rack width, 2U height; weighs only 20 lbs.
- AC/DC coupled.
- Four-quadrant operation.
- AE Techron Tough: Protection from over-temperature, over-current, over/under supply voltages; will drive capacitive and inductive loads.

7114 Meet your new lab partner

AE Techron's **7114** AC/DC amplifier is a 400-VA, 4-quadrant, AC and DC amplifier that provides exceptional versatility and value. Compact size, user configurability, DC-Max™ topology, and AE Techron toughness makes the 7114 the ideal lab partner for automotive conducted immunity testing, PSRR testing, or any application where more voltage or current is needed than is available from the signal source.

Compact Power

The 7114 weighs just 20 pounds and fits into one-half of a 2U rack space, but still can output up to 400 watts RMS continuous. This makes the 7114 a great choice when size or portability are important selection criteria.

Versatile

Front panel user controls give the 7114 a wide range of possible uses; gain, maximum current, and DC offset can be fixed or infinitely varied. The choice of AC or DC coupling makes it suitable both for DC applications and for driving objects like coupling transformers or piezo elements that shouldn't see DC. All controls can be turned off when only a durable, high-current amplifier or DC source is needed.

Or each function can be individually enabled to provide the unique set of capabilities needed at the moment.

The 7114 can supply a fixed DC voltage indefinitely, making it essential for DC power tests lasting minutes or hours.

It can also produce a DC output without an input signal and independent of amplifier gain. When an inexpensive function generator is added, the 7114 becomes a versatile test solution providing DC with both ripple and dropout.

DC-Max™

7114 is built with our new DC-Max topology. Amplifiers with DC-Max have long term DC power that is more than 40% greater than traditional designs. This increased DC performance better matches the power requirements found in DC conducted immunity and PSRR testing.

AE Techron Toughness

The 7114 is compact in size, but it is designed using the same conservative design rules and protection systems that have made AE Techron amplifiers the toughest audio bandwidth amplifiers available.

AE TECHRON
aetechron.com

AC Specifications High Voltage Mode

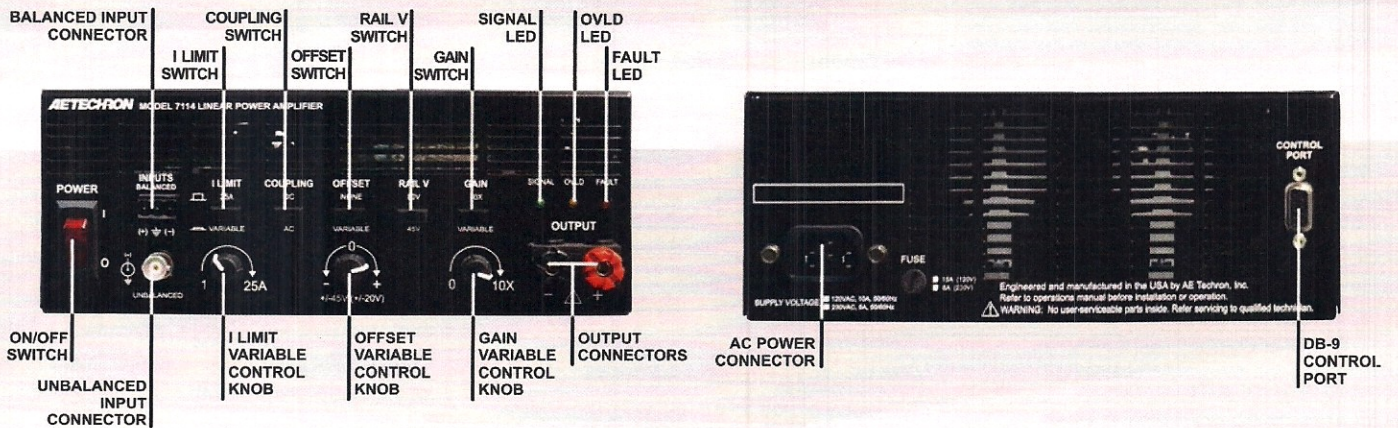
Ohms	PEAK OUTPUT						RMS OUTPUT				
	40 mSec Pulse, 20% Duty Cycle		5 Minutes, 100% Duty Cycle		1 Hour, 100% Duty Cycle		5 Minutes, 100% Duty Cycle		1 Hour, 100% Duty Cycle		
	Volts	Amps	Volts	Amps	Volts	Amps	Volts	Amps	Volts	Amps	Watts
Open	90.5	0.0	90.5	0.0	90.5	0.0	64.0	0.0	64.0	0.0	0
16	76.8	4.8	76.8	4.9	76.8	4.9	54.3	3.4	54.3	3.4	185
8	68.2	8.6	68.2	8.6	68.2	8.6	48.2	6.1	48.2	6.1	292
4	58.0	14.6	56.6	14.1	56.6	14.1	41.1	10.3	41.0	10.3	422
2	42.4	21.2	42.4	21.2	28.3	14.1	30.0	15.0	20.0	10.0	200

AC Specifications High Current Mode

Ohms	PEAK OUTPUT						RMS OUTPUT				
	40 mSec Pulse, 20% Duty Cycle		5 Minutes, 100% Duty Cycle		1 Hour, 100% Duty Cycle		5 Minutes, 100% Duty Cycle		1 Hour, 100% Duty Cycle		
	Volts	Amps	Volts	Amps	Volts	Amps	Volts	Amps	Volts	Amps	Watts
Open	42.4	0.0	42.4	0.0	42.4	0.0	30.0	0.0	30.0	0.0	0
4	31.7	8.1	31.7	8.1	31.7	8.1	22.4	5.7	22.4	5.7	127
2	27.9	14.0	26.6	13.4	26.6	13.4	18.8	9.5	18.8	9.5	178
1	19.8	19.8	19.8	19.8	19.8	19.8	14.0	14.0	14.0	14.0	196
0.5	12.0	24.0	12.0	24.0	12.0	24.0	8.5	17.0	8.5	17.0	128

DC Specifications

VDC	OUTPUT (Amperes)	
	5 Minutes, 100% Duty Cycle	1 Hour, 100% Duty Cycle
48	12	8
24	10	9
13.5	20	15



Front Panel Controls, Connectors and Indicators

Back Panel Connectors

