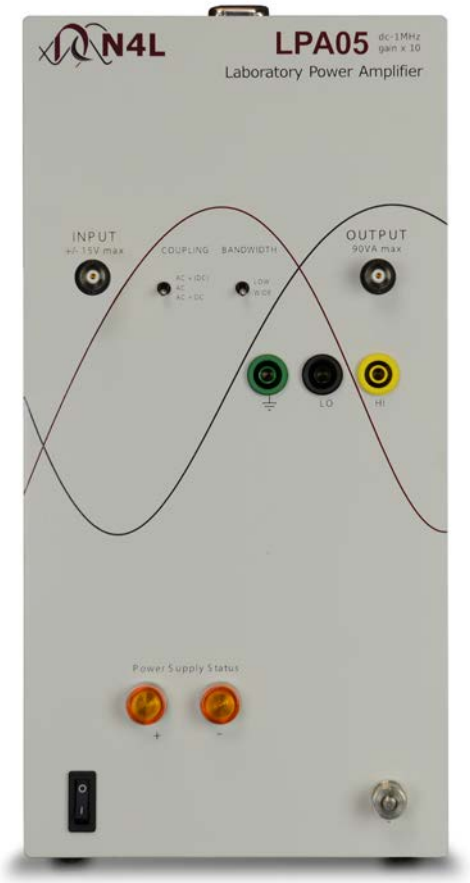
Laboratory power amplifier LPA05



Features:

- DC and AC wide bandwidth
- Switch selectable coupling options: AC, AC+DC or AC with reduced DC
- Fixed x10 Gain
- Switch selectable bandwidth
- High slew rate
- Isolated BNC or 4mm output sockets
- ± 40V peak, 3A rms @ dc-500kHz
  ± 20V peak, 1A rms @ 1MHz
  (LPA05A resistive load))
- ± 18V peak, 5A rms @ dc-500kHz
  ± 18V peak, 2A rms @ 1MHz
  (LPA05B resistive load)
- Unconditionally stable into any load
- Isolated from ground to prevent earth loops
- Robust metal enclosure

LPA05A & LPA05B provide wide bandwidth signal amplification at up to 8A peak, extending the range of industrial and laboratory applications into which the LPA series can be used.

LPA05: High frequency, high current testing of very low impedance loads, follow guidance in user manual if DUT impedance is below 5 ohms

-Also in the LPA range -

LPA01: High frequency, testing of low impedance loads at up to 1Apk
e.g. wound components

LPA400: High voltage, high frequency testing and calibration
Driving high voltage actuators (e.g. piezo) up to ± 400V

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The LPA range of power amplifiers from N4L are robust and reliable for use in a variety of industrial and laboratory applications. Designed originally for use with the PSM* range Phase Sensitive Multimeters, they can also be used anywhere where there is a need to boost a signal either in voltage or current.
They combine dc accuracy with wide bandwidth to faithfully reproduce complex waveforms, driving loads that may be capacitive, inductive or resistive.
Optionally, the dc component can be eliminated with ac coupling, or can be reduced with ac+(dc) coupling. To limit high frequency noise, the input bandwidth can be reduced with a linear phase, 2nd order, low pass filter for low frequency applications.

Specifications:

Parameter	LPA05A	LPA05B
Output Voltage	40V pk-pk (14Vrms) @ 1MHz	36V pk-pk (12Vrms) @ dc-1MHz
	80V pk-pk (28Vrms) @ dc-500kHz	
Max ac output current	3A rms 5A pk	5A rms 8A pk
Max dc output current	2A	4A
Input connector	isolated BNC	
Input impedance	10kΩ	
Peak input voltage	±4V	
Input common mode range	±40V	
Input offset voltage	5mV (max)	
	1mV (typ)	
Input coupling	ac, ac+dc, ac+(dc)	
AC coupling filter –3dB	16Hz	
(dc) gain factor	0.1	
Low B/W filter attenuation	40 dB/decade	
Low B/W filter type	linear phase	
Gain	x10	
Slew rate	120 V/us	
Output connector	isolated BNC + 4mm safety connectors	
Output power	90 VA	
Operating temperature range	0 - 40 °C	
Size	30 x 15 x 25 cm	
Weight	6 kg (approx)	
Power source	90-265V 45-63Hz	
Power consumption	150 VA	

All specifications at 23°c +/- 5°c

These specifications are quoted in good faith but Newtons4th Ltd reserves the right to amend any specification at any time without notice

*** The PSM range includes the PSM1700, PSM1735, PSM2200 and PSM2201 that incorporate gain/phase analysis, LCR meter, phase angle voltmeter, wideband true rms meter, Power analyser, harmonic analyser and more.**

The LPA range is designed & manufactured in the UK by Newtons4th Ltd.