

## ATA-300 Series Power Amplifier

High current, high power

The input and output resistances are adjustable



## Technical Index

Bandwidth (-3dB) DC~30kHz

Maximum output power 810Wp

Voltage gain 0.1 step/1 step continuously adjustable

## Introduction

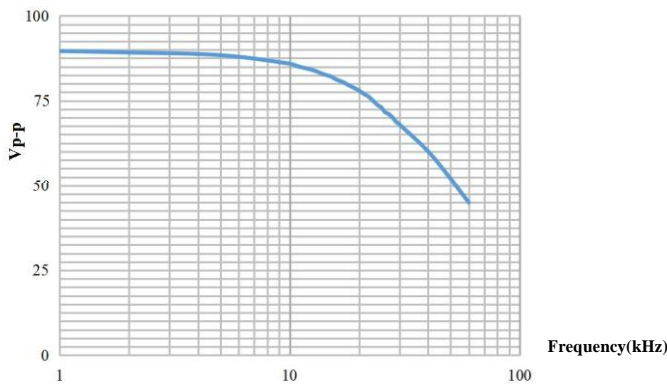
ATA-300 series power amplifier is an ideal power amplifier that can amplify AC and DC signals. The maximum output power is 810Wp, which can drive power type loads. The voltage gain can be adjusted by numerical control, and the common settings can be saved with one click. It can be used with mainstream signal generator to realize lossless signal amplification.

Model	ATA-304	ATA-308	ATA-309
Form of output	Single output	Differential output	Single output
Bandwidth (-3dB)	DC~30kHz	DC~30kHz	DC~30kHz
Maximum output voltage	90Vp-p ( $\pm 45$ Vp)	180Vp-p ( $\pm 90$ Vp)	90Vp-p ( $\pm 45$ Vp)
Maximum output current	4Ap (DC~50Hz)	4Ap (DC~50Hz)	9Ap (DC~50Hz)
	8Ap (>50Hz)	8Ap (>50Hz)	18Ap (>50Hz)
Maximum output power	360Wp	720Wp	810Wp
Fuse	8A/250V	8A/250V	10A/250V
Voltage gain	x0~30 (0.1 step/1 step)	x0~60 (0.1 step/1 step)	x0~30 (0.1 step/1 step)
Load $R_L$ upper limit	$\geq 11.15\Omega$ (DC~50Hz)	$\geq 22\Omega$ (DC~50Hz)	$\geq 4.9\Omega$ (DC~50Hz)
	$\geq 5.5\Omega$ (>50Hz)	$\geq 10.75\Omega$ (>50Hz)	$\geq 2.4\Omega$ (>50Hz)
Output resistance	0.1 $\Omega$	0.5 $\Omega$	0.1 $\Omega$
Slew rate	$\geq 6$ V/ $\mu$ s	$\geq 12$ V/ $\mu$ s	$\geq 6$ V/ $\mu$ s
Input resistance	5k $\Omega$		
Input amplitude	0~10Vp-pMAX		
Output voltage error	$\leq \pm 3\%$ FS@1kHz		
Total harmonic distortion (THD)	$\leq 0.5\%$ @1kHz, 90Vp-p		
Output voltage zero drift	$\leq \pm 0.3$ V		
Signal-noise ratio(SNR)	$\geq 80$ dB		
Output connector	4mm Banana socket		
Protection	Overcurrent protection		
Signal ground	Ground connected with the case and the power line		

## Xi'an Aigtek Electronic Technology Co., Ltd.

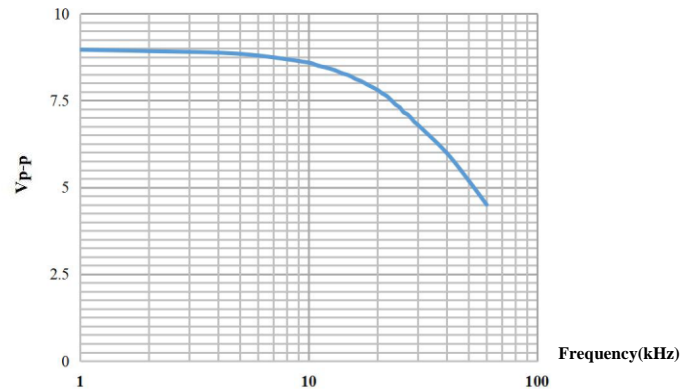
Supply voltage	AC220V±10%, 50Hz
Operating temperature	0°C~45°C
Storage temperature	-20°C~50°C
Humidity	≤80%RH, no condensation
Size (W * H * D)	440*163*470mm

**ATA-304**



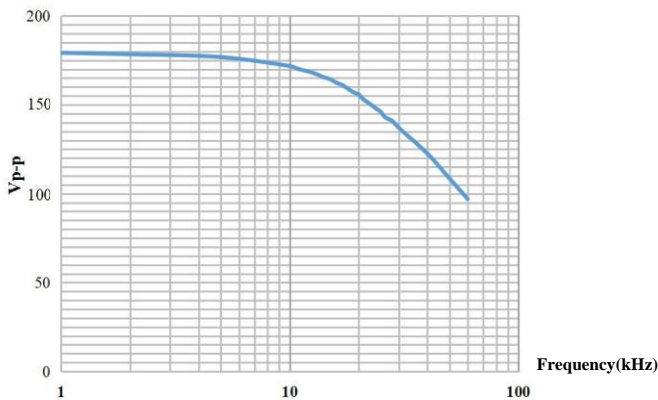
Amplitude-frequency characteristic  
(Maximum output voltage V<sub>p-p</sub>)

**ATA-304**



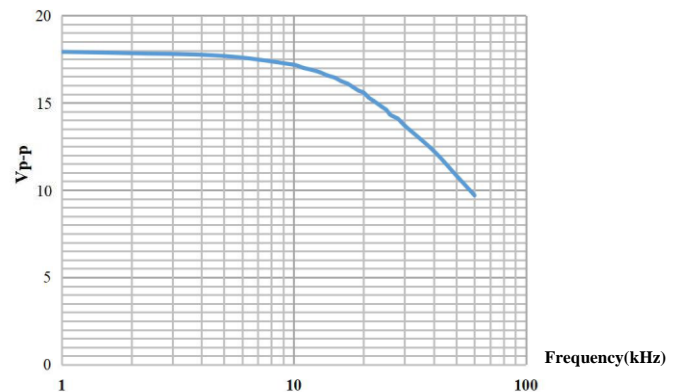
Small signal amplitude-frequency characteristic

**ATA-308**



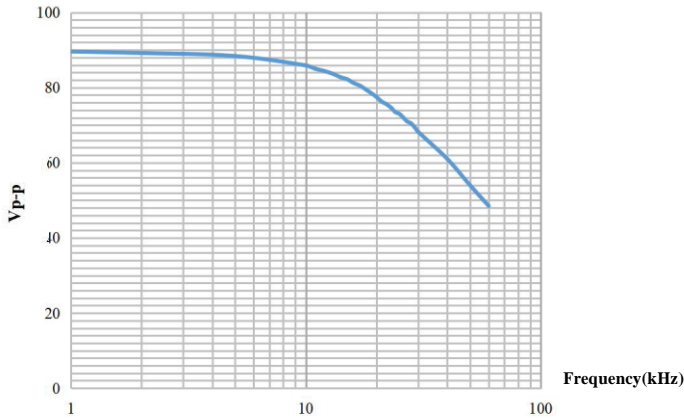
Amplitude-frequency characteristic  
(Maximum output voltage V<sub>p-p</sub>)

**ATA-308**



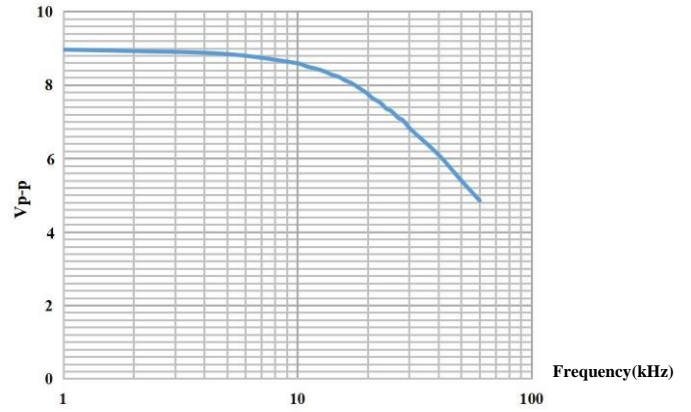
Small signal amplitude-frequency characteristic

ATA-309



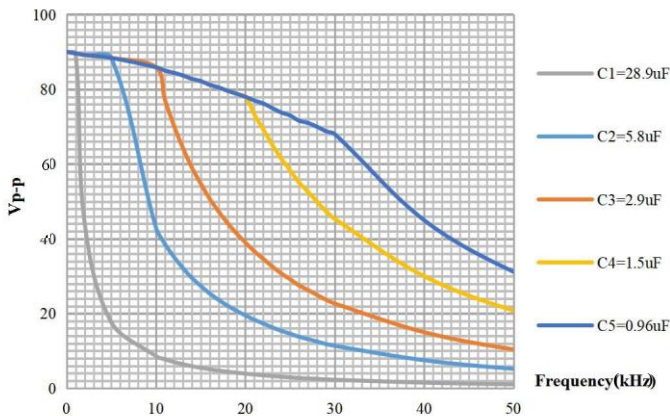
Amplitude-frequency characteristic  
(Maximum output voltage  $V_{p-p}$ )

ATA-309



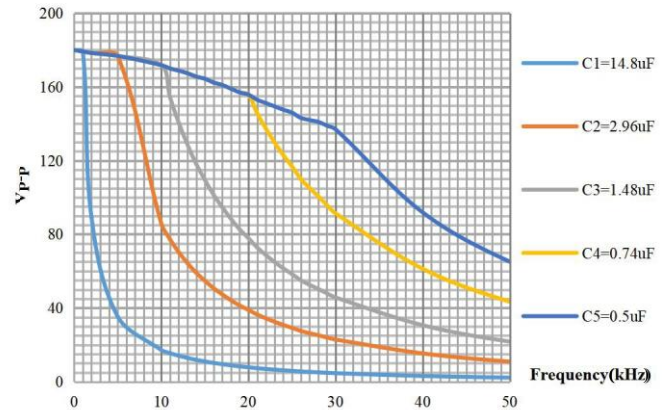
Small signal amplitude-frequency characteristic

ATA-304



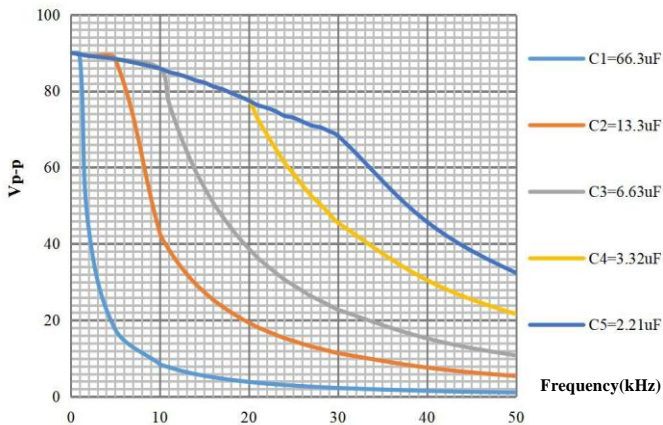
ATA-304 Capacitive loads curve

ATA-308



ATA-308 Capacitive loads curve

ATA-309



ATA-309 Capacitive loads curve