

Specifications

HSA series

Model	HSA 4051	HSA 4052	HSA 4101	
Frequency range	DC to 500kHz		DC to 10MHz	
Output	300Vp-p ($\pm 150V$) ● $\pm 150V$ range RL=100 Ω 100Vrms (40Hz to 200kHz) 40Vrms (20Hz to 500kHz) RL=300 Ω $\pm 150V$ (DC to 50kHz) $\pm 55V$ (DC to 500kHz) ● -50 to +250V range RL=500 Ω -50 to +250V (DC to 50kHz) +45 to +155V (DC to 500kHz) ● -250 to +50V range RL=500 Ω -250 to +50V (DC to 50kHz) -155 to -45V (DC to 500kHz)	300Vp-p ($\pm 150V$) ● $\pm 150V$ range RL=50 Ω 100Vrms (40Hz to 200kHz) 40Vrms (20Hz to 500kHz) RL=150 Ω $\pm 150V$ (DC to 50kHz) $\pm 55V$ (DC to 500kHz) ● -50 to +250V range RL=250 Ω -50 to +250V (DC to 50kHz) +45 to +155V (DC to 500kHz) ● -250 to +50V range RL=250 Ω -250 to +50V (DC to 50kHz) -155 to -45V (DC to 500kHz)	142Vp-p ($\pm 71V$) RL=50 Ω 50Vrms (40Hz to 100kHz) 46Vrms (100kHz to 1MHz) 35Vrms (1MHz to 10MHz) 17Vrms (10MHz to 20MHz) RL=71 Ω $\pm 71V$ (DC to 40Hz)	
	Maximum current	1A rms, 2.83Ap-p (40Hz to 200kHz) $\pm 0.5A$ (DC to 40Hz)	2A rms, 5.66Ap-p (40Hz to 200kHz) $\pm 1.0A$ (DC to 40Hz)	$\pm 1.4A$ (40Hz to 100kHz), $\pm 1.3A$ (100kHz to 1MHz) $\pm 1.0A$ (1MHz to 10MHz), $\pm 1A$ (DC to 40Hz)
	Slew rate	450V/ μs typ.	450V/ μs typ.	5000V/ μs typ.
	Impedance	1 Ω + 3.2 μH max.	0.5 Ω + 1.6 μH max.	1.5 Ω + 0.5 μH typ.
	Preamplifier output	Opposite phase of input. (Available for 2 units BTL connection), Connector BNC-R on rear panel		---
	DC bias	$\pm 200V$ (by 10 turns potentiometer)		$\pm 70V$ (by 10 turns potentiometer)
	Other functions	Monitor meter*1, Monitor output, DC offset adjustment, Output ON/OFF switch		
Input	Type	2 inputs of A and B (Enable to add), Same phase both of A and B input against output		
	Impedance	50 Ω /600 Ω selectable		
Gain	$\times 20$, $\times 40$, $\times 100$, $\times 200$ and $\times (1 \text{ to } 3)$ variable continuously		$\times 10$, $\times 20$, $\times 50$, $\times 100$ and $\times (0.4 \text{ to } 1)$ variable continuously	
Frequency response	500kHz (+0.5 to -3dB, 20Vrms, $\pm 150V$ range)		10MHz (+0.5 to -3dB, 10Vrms)*2	
Input voltage	AC100V (One of 120V/200V/220V/240V can be modified by factory option), 48Hz to 62Hz		AC85V to 138V, AC170V to 250V, 48Hz to 62Hz	
Power consumption	340W/500VA	700W/900VA	400W/700VA	
Dimensions (mm)/Weight	290(W) \times 132.5(H) \times 450(D)/approx.13kg	290(W) \times 177(H) \times 450(D)/approx.18kg	220(W) \times 177(H) \times 450(D)/approx.7.8kg	
Reference	*1 Average value indication of DC+AC *2 DC mode :DC to 100kHz($\pm 0.3dB$), AC mode :40Hz cutoff frequency HPF is inserted.		※Only HSA 4101 enables input coupling (AC/DC) to change.	