

ATA-5000 Series Preamplifier



Main features

- Small signal amplification
- Ultra low noise
- High gain

Applications

- Infrared sensor detection
- Weak magnetic field sensor detection
- Light testing for phototransistor

Technical Index

Model	ATA-5210	ATA-5220	ATA-5310	ATA-5320	ATA-5410
Bandwidth (-3dB)	1kHz~5MHz	1kHz~5MHz	1kHz~10MHz	1kHz~10MHz	1kHz~20MHz
Input resistance	50Ω	50Ω	50Ω	50Ω	50Ω
Input conversion Noise voltage	0.7nV/√Hz 以下 (1kHz) 0.5nV/√Hz typ (1k~1MHz)	1.7nV/√Hz 以下 (1kHz) 1.5nV/√Hz typ (1k~1MHz)	0.7nV/√Hz 以下 (100kHz) 0.5nV/√Hz typ (10k~1MHz)	1.7nV/√Hz 以下 (100kHz) 1.5nV/√Hz typ (10k~1MHz)	1.2nV/√Hz 以下 (100kHz) 0.9nV/√Hz typ (10k~1MHz)
Input conversion / Noise current	7pA/√Hz typ (10kHz)	13pA/√Hz typ (10kHz)	7pA/√Hz typ (10kHz)	13pA/√Hz typ (10kHz)	7pA/√Hz typ (10kHz)
Maximum output voltage	2 Vp-p (50Ω)	2 Vp-p (50Ω)	2 Vp-p (50Ω)	2 Vp-p (50Ω)	2 Vp-p (50Ω)
Output impedance	50Ω	50Ω	50Ω	50Ω	50Ω
Voltage gain	46 dB	60 dB	46 dB	60 dB	46 dB
Size (w * h * d)	135*70*25mm				

Technical Index

Model	ATA-5420	ATA-5510	ATA-5520	ATA-5610	ATA-5620
Bandwidth (-3dB)	1kHz~20MHz	1kHz~50MHz	1kHz~50MHz	1kHz~100MHz	1kHz~100MHz
Input resistance	50Ω	50Ω	50Ω	50Ω	50Ω
Input conversion Noise voltage	1.9nV/√Hz 以下 (100kHz) 1.2nV/√Hz typ (10k~1MHz)	1.2nV/√Hz 以下 (100kHz) 0.9nV/√Hz typ (10k~1MHz)	1.9nV/√Hz 以下 (100kHz) 1.2nV/√Hz typ (10k~1MHz)	1.2 nV/√Hz 以下 (100kHz) 0.9nV/√Hz typ (10k~1MHz)	1.9nV/√Hz 以下 (100kHz) 1.2nV/√Hz typ (10k~1MHz)
Input conversion / Noise current	13pA/√Hz typ (10kHz)	7pA/√Hz typ (10kHz)	13pA/√Hz typ (10kHz)	7pA/√Hz typ (10kHz)	13pA/√Hz typ (10kHz)
Maximum output voltage	2 Vp-p (50Ω)	2 Vp-p (50Ω)	2 Vp-p (50Ω)	2 Vp-p (50Ω)	2 Vp-p (50Ω)
Output impedance	50Ω	50Ω	50Ω	50Ω	50Ω
Voltage gain	60 dB	46 dB	60 dB	46 dB	60 dB
Size (w * h * d)	135*70*25mm				

ATA-P5000 Preamplifier low noise power supply (Option)

Supply voltage	AC220V±10%, 50Hz	Fuse	0.5A/250V
Output voltage	DC15V	Operating temperature	0°C ~45°C
Maximum output current	200mA	Storage temperature	-20°C ~50°C
Output noise voltage	< 50μVrms (10Hz to 20MHz)	Humidity	≤ 80%RH, no condensation