

High Voltage Amplifier

AMS Series 600V to $\pm 10\text{kV}$

1007-04Pa



FEATURES

- Output $\pm 600\text{V}$ to $\pm 10\text{kV}$
- High speed response $30\text{V}/\mu\text{sec}$
- All solid state
- Various types of output wave forms according to the input wave
- DC bias function
- DC output voltage monitor (3½ digit meter)

SUMMARY

AMS series is a rack mountable type, fast response high voltage operational amplifier. It gives quick response as fast as 30kHz and provides high voltage outputs in reference to its input wave forms such as Sine, Triangle, Saw Tooth, and Square Wave Forms. 6 different models are available as a standard unit. They are all solid state. Output voltage ranges from $\pm 600\text{V}$ to $\pm 10\text{kV}$.

Output voltage (Vdc)	Current (mA)	MODEL Bi- Polar	Slew Rate (full scale)	Frequency Response(-3dB)		Dimensions mm(inch)
				full scale	10% of full scale	
-600 to +600	50	AMS-0.6B50	30V/ μs	DC to 15kHz	DC to 30kHz	133H \times 482W \times 480D (5.3H \times 19W \times 18.9D)
-1k to +1k	30	AMS-1B30		DC to 10kHz	DC to 20kHz	
-1.5k to +1.5k	20	AMS-1.5B20		DC to 6kHz	DC to 15kHz	
-3k to +3k	10	AMS-3B10		DC to 3kHz	DC to 10kHz	
-5k to +5k	6	AMS-5B6		DC to 2kHz	DC to 5kHz	
-10k to +10k	2	AMS-10B2		DC to 1kHz	DC to 3kHz	

SPECIFICATIONS

Input voltage	115VAC $\pm 10\%$ 50/60Hz, 1 ϕ
Output control	External voltage control Vcon-in -10V to +10V * ¹ (input impedance : $\geq 10\text{k}\Omega$)
DC-BIAS	10 turn potentiometer -100% to +100%
Regulation	Line $\pm 0.05\%$ ($\pm 10\%$ line change) Load 0.05% (10 to 100% load change)* ²
Ripple	$\leq 0.1\%$ p-p * ²
Stability	0.016%/Hr TYP. * ²
Digital Panel Meter	3½-digit display * ³
Voltage Monitor	-10V to +10V from BNC connector on front panel. (output impedance $1\text{k}\Omega$)
Remote ON/OFF	Enable to output ON/OFF by external contact signal (short:ON, open:OFF)
Protection	Protection against overcurrent by cutting of HV output. Output short circuit and over voltage. Arc discharge. Disable HV output after AC power Line recovery.
Operating Temp.	0°C to 40°C
Storage Temp.	-20°C to 60°C
Weight	14 to 18kg(typical)
Input-Output Cable	Input AC cable : 2.5m(8.2ft) Output cable : 1.5m(5ft) Non shielded HV cable

*¹ Offset voltage : within 0.5% of rated output at Vcon-in = 0V*² Value at DC output with resistive load maximum rating*³ DC output : DC voltage

More than 10Hz output : Average voltage

OPTIONS

- LC** CURRENT LIMIT
Limits the output current at time of overload
- L1** Output current monitor -10V to +10V from BNC connector on front panel (output impedance $1\text{k}\Omega$)
- L(230V)** Input Voltage AC230V $\pm 10\%$, 1 ϕ
- *When ordering, please suffix L Mark(option mark) to the model number.
(e.g.) AMS-1P30-LC, AMS-1P30-LC1(230V)
For combined options, please arrange option marks in an alphabetical order.
- CN-40-AHVP** Output HV cable 1.5m length
- *For longer cable than 1.5m is required specify by meter.
(e.g.) CN-40-AHVP(3)

RESPONSE WAVEFORM

