

Desk-top size

# Ultra Compact and Fast Response HV Amplifier



40W model



20W model

AMJ series is a rack mountable type, fast response high voltage operational amplifier. It provide high voltage and fast response as high as 75kHz according to its input waveforms including Sine, Triangle, Saw Tooth, Square and more. 7 different models are available as an standard unit. They are all solid state power supplies. Output voltage ranges from  $\pm 500V$  to  $\pm 4kV$ .

## FEATURES

- Ultra compact
- High speed response 75kHz max
- Various types of output wave forms according to the input wave
- DC bias function
- DC output voltage monitor (3.5-digit digital meter)

## APPLICATIONS

- Beam deflection
- Breakdown voltage testing
- Electrophotography process
- Lighting discharge tube
- Corona discharge
- Electrostatic chuck
- Electroviscosity fluid
- Various electrostatic testing

## LINEUP

Output voltage (Vdc)	Output current (mA)	MODEL	Slew rate	Frequency response (-3dB)	Dimensions (P.11)
-500 to +500	40	AMJ-0.5B40	150V / $\mu$ s	DC to 75kHz	B
	80	AMJ-0.5B80			A
-1k to +1k	20	AMJ-1B20		DC to 40kHz	B
	40	AMJ-1B40			A
-2k to +2k	10	AMJ-2B10		DC to 18kHz	B
	20	AMJ-2B20			A
-4k to +4k	10	AMJ-4B10	DC to 9kHz	A	

## SPECIFICATIONS

<b>Input voltage</b>	85V to 264VAC 50 / 60Hz single phase
<b>Output voltage control</b>	External control voltage Vcon-in = -10V to +10V*1 (Input Impedance greater than 10kΩ)
<b>DC Bias</b>	Front panel 10-turn potentiometer enables setting between -100% and +100%
<b>Regulation</b>	Line : ±0.05%(115V ±10% input change) Load : 0.05%(10 to 100% load change) *2
<b>Ripple</b>	Less than 0.1% *2
<b>Stability</b>	0.016% / H typ *2
<b>DC output voltage display</b>	3.5-digit digital meter *3
<b>Output voltage monitor</b>	-10V to +10V from front panel BNC terminal (Output impedance 1kΩ)
<b>Remote switch ON / OFF</b>	Output ON / OFF with external contact signal (Short : ON, Open : OFF)
<b>Protection</b>	Over current protection with cut off, over voltage protection, output short circuit, arc protection and blackout protection.
<b>Operating Temp.</b>	0°C to +40°C
<b>Storage Temp.</b>	-20°C to +60°C
<b>Humidity</b>	20 to 80%RH(no condensation)
<b>Accessories</b>	Input AC cable 2.5m (1) Output HV cable flying lead 1.5m (1) Instruction Manual (1)

\*1 Offset voltage at Vcon-in = 0V is less than 0.5% of rated output.

\*2 At DC operation with resistive load maximum rated output.

\*3 At DC output : DC voltage display.

At more than 10Hz output : Average voltage display

## OPTION

- LCs** Over current protection setting function  
Set the over current value by external voltage
- L(5m)** HV output cable 5m  
Please note that using 5-meter long cable may decrease slew rate, response time, and distort output waveforms.  
Please see Page 15 "Capacitive load" for details.

## INPUT / OUTPUT CABLE

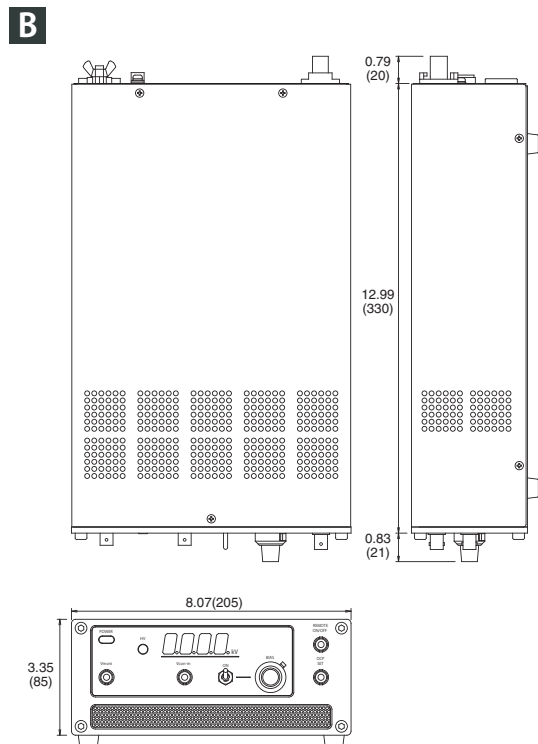
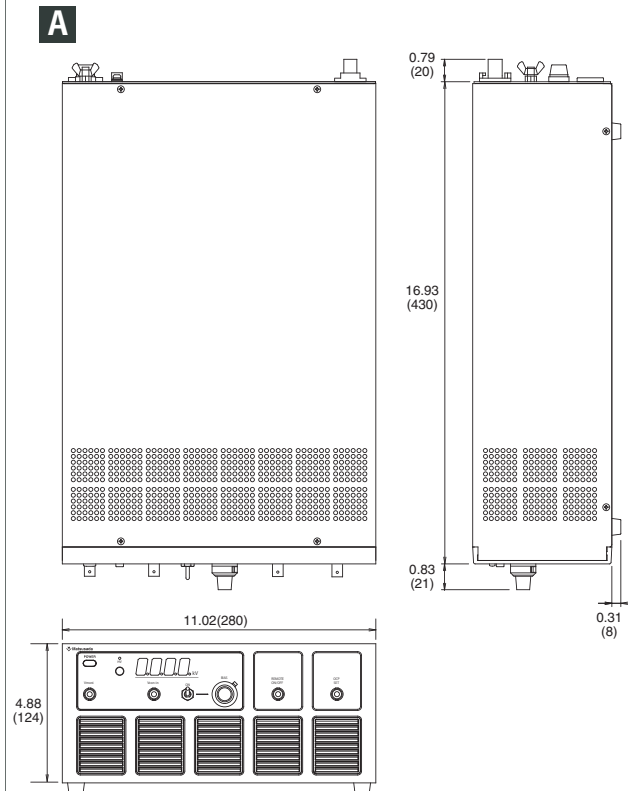
### Input cable

- ➔ **CABLE TYPE 1** (Standard)
- ➔ **CABLE TYPE 3** (Separated)  
In case using with 220VAC input

### Output cable

- CN-40-AHVP HV output cable 1.5m (standard)
- CN-40-AHVP(5) HV output cable 5m (-L(5m) option)

## DIMENSIONS inch(mm)



AMP

AMS / AMT

COR-10B2

AMJ

AP / AS

