



- OUTPUT VOLTAGE RANGE: 0~±5KVDC OR PEAK AC
- OUTPUT CURRENT 0~±8mA DC OR PEAK AC
- SLEW RATE: >150V/US
- LARGE SIGNAL BANDWIDTH (-3DB) D> 13KHZ
- DC VOLTAGE GAIN: 500V/V
- IN-PHASE PROPORTIONAL AMPLIFIER
- FOUR QUADRANT OUTPUT DRIVES EITHER CAPACITIVE OR RESISTIVE LOADS
- CLOSED LOOP SYSTEM, LOW NOISE, HIGH PRECISION
- SHORT CIRCUIT PROTECTION FUNCTION
- CAN BE USED AS DC POWER SUPPLY

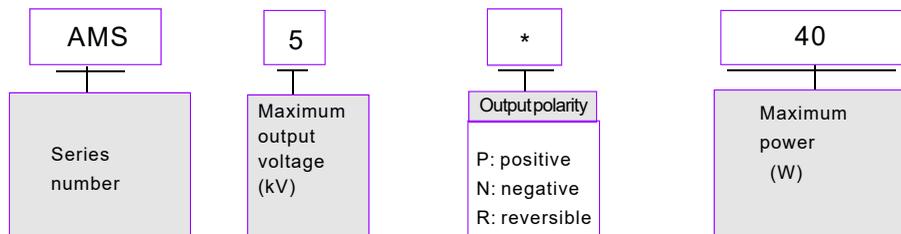
## INTRODUCTION

Wisman AMS series is a high stability, high power high voltage amplifier power supply for industrial and scientific applications. AMS is a solid state design with high reversal rate, wide bandwidth and low noise. Four quadrant power supply, suitable for reactive or resistive load. AMS is an in-phase amplifier with a magnification of 500. Prevents overvoltage or overcurrent caused by short circuit of active load or output to ground. Precision voltage and current display monitors high voltage output and load current. The reversal rate depends on different loads, such as high capacitive or resistive loads.

## APPLICATIONS

Media research, electron beam and ion source, electrostatic monitoring (including ion beam control), spark controller, electrostatic suspension, high voltage cable test and high pressure component testing, research, including dielectric barrier discharge plasma electrostatic deflection, electrophoresis, electrorheological fluids, electro-optic modulation, polarization of materials, ac or dc bias ion beam steering, particle accelerators, mass spectrometer, materials characterization, ferroelectric, atmospheric plasma, piezoelectric ceramics, dielectric barrier discharge.

## SELECTION EXAMPLE



HIGH VOLTAGE AMPLIFIER

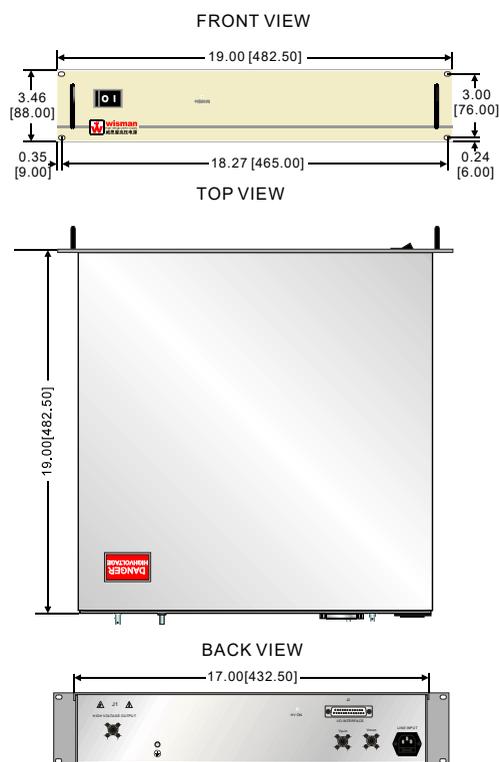
## SPECIFICATION

PARAMETER	DESCRIPTION
Input	220Vac±10%, Max current 1A, (110Vac optional, Max current 2A).
Output voltage	0 to ±5 kV DC or peak AC
Output current	0 to ±8mA DC or peak AC
Output voltage control	0 to ±10 V DC or peak AC, Zin=25kΩ
Dc voltage gain	500V/V
Dc voltage gain accuracy	<0.1%。
DC offset voltage	< ±2V
Output noise	<0.5Vrms
Slew rate	>150V/us(Typical values, 10%~90%)
Large signal bandwidth (-3dB)	DC to 13kHz
Large signal bandwidth (-3dB)	DC to 6kHz
Small signal bandwidth	DC to 35kHz
Stability	<50ppm/hr, noncumulative
Temperature coefficient	≤25ppm/°C
Voltage monitor	Monitor ratio:1:500;Accuracy: < ±0.1%; offset voltage: < ±2mV; noise: < 10mVrms; Zout=47 Ω
Current monitor	Monitor ratio:1V/800uA; Accuracy:<±0.1%; offset voltage:<±10mV; noise<10mVrms; Zout=47Ω
Operating temperature and humidity	0~40° C, 0~85%, No condensation
Dimension	88 mm H x 210 mm W x 365 mm(3.46" H x 8.27" W x 14.37" D)。
Weight	7kg

## AMS ANALOG INTERFACE (OPTIONAL)

J2	Signal	Parameter
1	Vmon, voltage monitor	0~±10Vdc=0~100%Rated output, Zout=47W
2	Ground	Connect Chassis Ground
3	N/C	No connection
4	N/C	No connection
5	+12Vdc	+12Vdc output
6	+12VDC interlock	+12Vdc closed, connect with pin5, interlock release
7	Ground	Ground
8	N/C	N/C
9	Program return ground	Program return ground
10	Vp-in, Voltage for given	0~±10Vdc=0~100%Rated output, Zin=25kW
11	N/C	N/C
12	N/C	N/C
13	N/C	N/C
14	N/C	N/C
15	N/C	N/C
16	N/C	N/C
17	Enable	High=on
18	N/C	N/C
19	N/C	N/C
20	N/C	N/C
21	Ground	Ground
22	Remote turn off ground	Remote turn off ground
23	Remote turn off	remote turn off, connect with 22 pin and disconnected
24	N/C	N/C
25	Ground	Ground

## MECHANICAL DIMENSIONS



HIGH VOLTAGE AMPLIFIER