



- OUTPUT VOLTAGE RANGE: 0~±5KVDC OR PEAK AC
- OUTPUT CURRENT 0~±20mADC OR PEAK AC
- SLEW RATE  $\geq$  500V/US
- LARGE SIGNAL BANDWIDTH >15KHZ
- 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

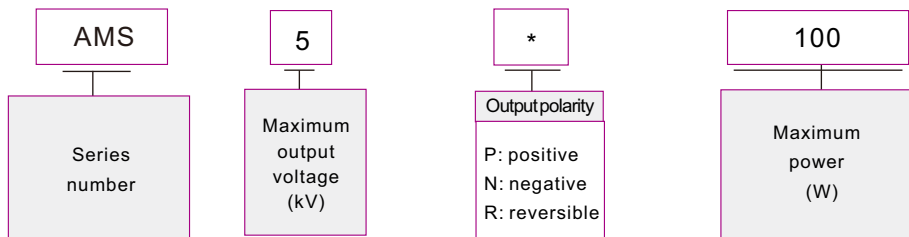
## INTRODUCTION

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

ISO9001:2015

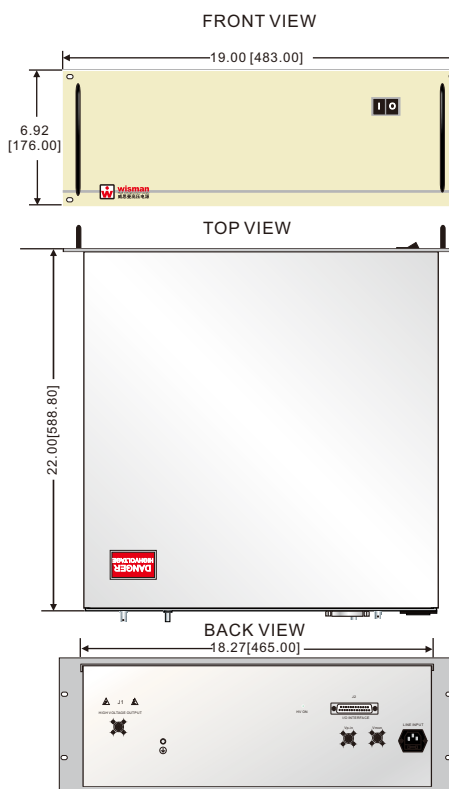
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PARAMETER	DESCRIPTION
Input	220Vac±10%, Max current 1A, (110Vac optional, Max current 2A).
Output voltage	0 to ±5 kV DC or peak AC
Output current	0 to ±20mA DC or peak AC
Output voltage control	0 to ±10 V DC or peak AC, Z <sub>in</sub> =25k $\Omega$
Dc voltage gain	500V/V
Dc voltage gain accuracy	<0.1%
DC offset voltage	< ±2V
Output noise	<50mVrms
Slew rate	>500V/us(Typical values 10%~90%)
Large signal bandwidth(1% distortion)	DC > 15kHz
Large signal bandwidth(1% distortion)	DC > 15kHz
Small signal bandwidth(-3db)	DC > 20kHz
Stability	<50ppm/hr, noncumulative
Temperature coefficient	≤25ppm/°C
Voltage monitor	Monitor ratio:1:1000;Accuracy:< ±0.1%; offset voltage:< ±2mV; noise:< 10mVrms; Z <sub>out</sub> =47 $\Omega$
Current monitor	Monitor ratio:1V/800uA;Accuracy:<±0.1%;offset voltage:<±10mV;noise:<10mVrms; Z <sub>out</sub> =47 $\Omega$
Operating temperature and humidity	0~40°C, 0~85% No condensation
Dimension	176 mm H x 483 mm W x 558.8 mm(6.92" H x 19" W x 22" D)(4U)
Weight	15kg

## AMS ANALOG INTERFACE (OPTIONAL)

## MECHANICAL DIMENSIONS

J2	Signal	Parameter
1	Vmon, voltage monitor	0~±10Vdc=0~100%Rated output, Z <sub>out</sub> =47 $\Omega$
2	Ground	Connect Chassis Ground
3	N/C	No connection
4	N/C	No connection
5	+12Vdc	+12Vdc output
6	+12 VDC 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 Z <sub>in</sub> =25k $\Omega$
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



HIGH VOLTAGE AMPLIFIER