



- OUTPUT VOLTAGE RANGE: 0~ $\pm$ 5KVDC or PEAK AC
- OUTPUT CURRENT 0~ $\pm$ 2mA DC OR PEAK AC
- SLEW RATE: >35V/US
- LARGE SIGNAL BANDWIDTH (-3DB) >1.2KHZ
- DC VOTLAGE GAIN:1000V/V
- IN-PHASE RATIO AMPLIFIER
- FOUR QUADRANT OUTPUT DRIVES EITHER CAPACITIVE OR RESISTIVE LOADS
- CLOSEDLOOP SYSTEM, LOW NOISE, HIGH PRECISION
- SHORT CIRCUIT PROTECTION FUNCTION
- CAN BE USED AS DC POWER SUPPLY

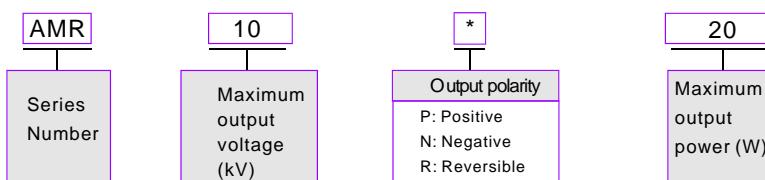
## INTRODUCTION

Wisman AMR series is a high stability, high power high voltage amplifier power supply for industrial and scientific applications. The AMR is a solid state design with high reversal rate, wide bandwidth and low noise. Four quadrant power supply, suitable for reactive or resistive load. AMR belongs to the in-phase amplifier, the amplification factor is 1000. 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





## SPECIFICATION

ISO9001:2015

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| PARAMETER                           | DESCRIPTION   |
|-------------------------------------|---|
| Input                               | 220Vac $\pm$ 10%, Max current 1A, (110Vac optional, Max current 2A).  |
| Output voltage                      | 0 to $\pm$ 10 kV DC or peak AC  |
| Output current                      | 0 to $\pm$ 2mA DC or peak AC  |
| Output voltage control              | 0 to $\pm$ 10 V DC or peak AC, Zin=25k $\Omega$   |
| Dc voltage gain                     | 1000V/V   |
| Dc voltage gain accuracy            | <0.1%.  |
| Dc offset voltage                   | < $\pm$ 2V  |
| Output noise                        | <0.5VRms  |
| Slew rate                           | >35V/us(Typical values, 10%~90%)  |
| Large signalbandwidth(-3dB)V        | DC to 1.2kHz  |
| Large signalbandwidth(1%distortion) | DC to 600Hz   |
| Small signal bandwidth (-3db)       | DC to 10kHz   |
| Stability                           | <50ppm/hr, noncumulative  |
| temperature coefficient             | $\leq$ 25ppm/ $^{\circ}$ C .  |
| Voltage monitor                     | Monitor ratio:1:1000; precision:< $\pm$ 0.1%,offset voltage:< $\pm$ 2mV,noise:<10mVRms; Zout=47 $\Omega$      |
| Current monitor                     | Monitor ratio:1V/200uA; precision:< $\pm$ 0.1%; offset voltage:< $\pm$ 10mV; noise:<10mVRms; Zout=47 $\Omega$ |
| Operating temperature and humidity  | 0~40° C, 0~85%, No condensation   |
| Overall dimensions                  | 88 mm H x 210 mm W x 365 mm(3.46" H x 8.27" W x 14.37" D)。  |
| Weight                              | 7kg   |

## AMR ANALOG INTERFACE(OPTIONAL)

| J2 | Singal                 | Parameter  |
|----|------------------------|--|
| 1  | Vmon, voltage monitor  | 0~ $\pm$ 10Vdc=0~100%Rated output,Zout=47W       |
| 2  | GND                    | Connect chassis ground                           |
| 3  | N/C                    | N/C  |
| 4  | N/C                    | N/C  |
| 5  | +12Vdc                 | +12Vdc output                                    |
| 6  | +12Vdc interlock       | +12Vdc closed,connect with pin 5,no interlock    |
| 7  | GND                    | GND  |
| 8  | N/C                    | N/C  |
| 9  | Program return GND     | Program return GND                               |
| 10 | Vp-in, Voltage program | 0~ $\pm$ 10Vdc=0~100%ratedoutput, 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 | GND                    | GND  |
| 22 | Remote off ground      | Remote off ground                                |
| 23 | Remote=turn off        | Remote turnoff,connect withpin22,Relieve turnoff |
| 24 | N/C                    | N/C  |
| 25 | GND                    | GND  |

## MECHANICAL DIMENSIONS

