

- OUTPUT VOLTAGE RANGE: 0~±10kVDC or PEAK AC
- OUTPUT CURRENT 0~±10mADC OR PEAK AC
- SLEW RATE>700V/ μ S
- LARGE SIGNAL BANDWIDTH DC>9.5KHZ
- DC VOTLAGE GAIN:1000V/V
- IN-PHASE RATIO 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

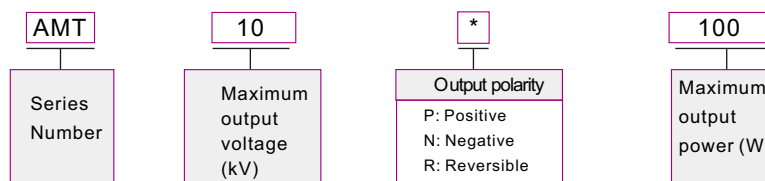
## INTRODUCTION

Wisman AMT series High voltage power amplifiers for industrial and research applications. All solid state high voltage insulation design, can achieve high conversion rate ,broadband and low noise operation. Four -quadtant active output absorbs or outputs current to a reactive or resistive load over the entire output voltage range. Wisman high voltage power supplies is essential for achieving accurate output response and the high rotation required for various loads, such as highly capacitive or reactive loads. The rate of change is critical. The amplifier is a in -phase amplifier.

## APPLICATIONS

Ferroelectric tester, Piezoelectric elements and piezoelectric (ferroelectric) material polarization, electrostatic deflection, electrophoretic method, electrorheological fluid, electro-optic modulation, material polarization, AC or DC bias, ion beam steering, Particle Accelerator, Mass Spectrometer, Material characterization, ferroelectric, Atmospheric plasma, dielectric barrier discharge.

## SELECTION EXAMPLE





## SPECIFICATION

ISO9001:2015

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| PARAMETER                             | DESCRIPTION  |
|---------------------------------------|--|
| Input                                 | 220Vac±10%, Max current 3A.  |
| Output voltage                        | 0 to ±10 kV DC or peak AC  |
| Output current                        | 0 to ±10mA DC or 40mA peak AC for 1ms  |
| Output voltage control                | 0 to ±10 V DC or peak AC, Z <sub>in</sub> =20kΩ  |
| Dc voltage gain                       | 1000V/V  |
| Dc voltage gain accuracy              | Better than 0.1% of full scale   |
| Dc offset voltage                     | <±2V   |
| Output noise                          | <0.5Vrms   |
| Slew rate                             | >700V/us(Typical values 10%~90%)   |
| Large signal bandwidth(-3db)          | DC to 19.5kHz  |
| Large signal bandwidth(1% distortion) | DC to greater than 9.5kHz  |
| Small signal bandwidth(3db)           | DC to greater than 60kHz   |
| Stability                             | <50ppm/hr, noncumulative   |
| temperature coefficient               | 25ppm/°C   |
| Voltage monitor                       | Monitor ratio: 1:1000; precision: <±0.1%, offset voltage: <±2mV, noise: <10mVrms; Z <sub>out</sub> =47Ω    |
| Current monitor                       | Monitor ratio: 0.025V/mA precision: >±0.5%; offset voltage: <±10mV; noise: <30mVrms; Z <sub>out</sub> =47Ω |
| Operating temperature and humidity    | 0°C~40°C (32°F~104°F), 0~85% No condensation   |
| Overall dimensions                    | 190mm H x 432 mm W x 417 mm D (10.4" H x 19" W x 25" D)  |
| Weight                                | 14.9kg   |

## AMT ANALOG INTERFACE(OPTIONAL)

| J2 | Sigal                  | Parameter  |
|----|------------------------|--|
| 1  | Vmon, voltage monitor  | 0~±10Vdc=0~100%Rated output, Z <sub>out</sub> =47Ω     |
| 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~±10Vdc=0~100%rated output Z <sub>in</sub> =25kΩ      |
| 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 turn off, connect with pin 22, Relieve turn off |
| 24 | N/C                    | N/C  |
| 25 | GND                    | GND  |

— HIGH VOLTAGE AMPLIFIER